

IRANIAN OIL EXPLORATION & PRODUCING COMPANY

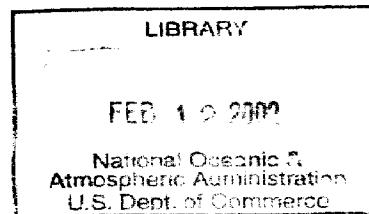
AIR SERVICES



METEOROLOGICAL SUMMARY

FOR

1963



QC
990
I 72
M 48
1963
Summary

National Oceanic and Atmospheric Administration

Climate Database Modernization Program

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March 28, 2002

To; General Services Division Tehran
From; Mr. Air Services, Abadan
Date; 24th. February 1964
Subject; Meteorological Summary for 1963

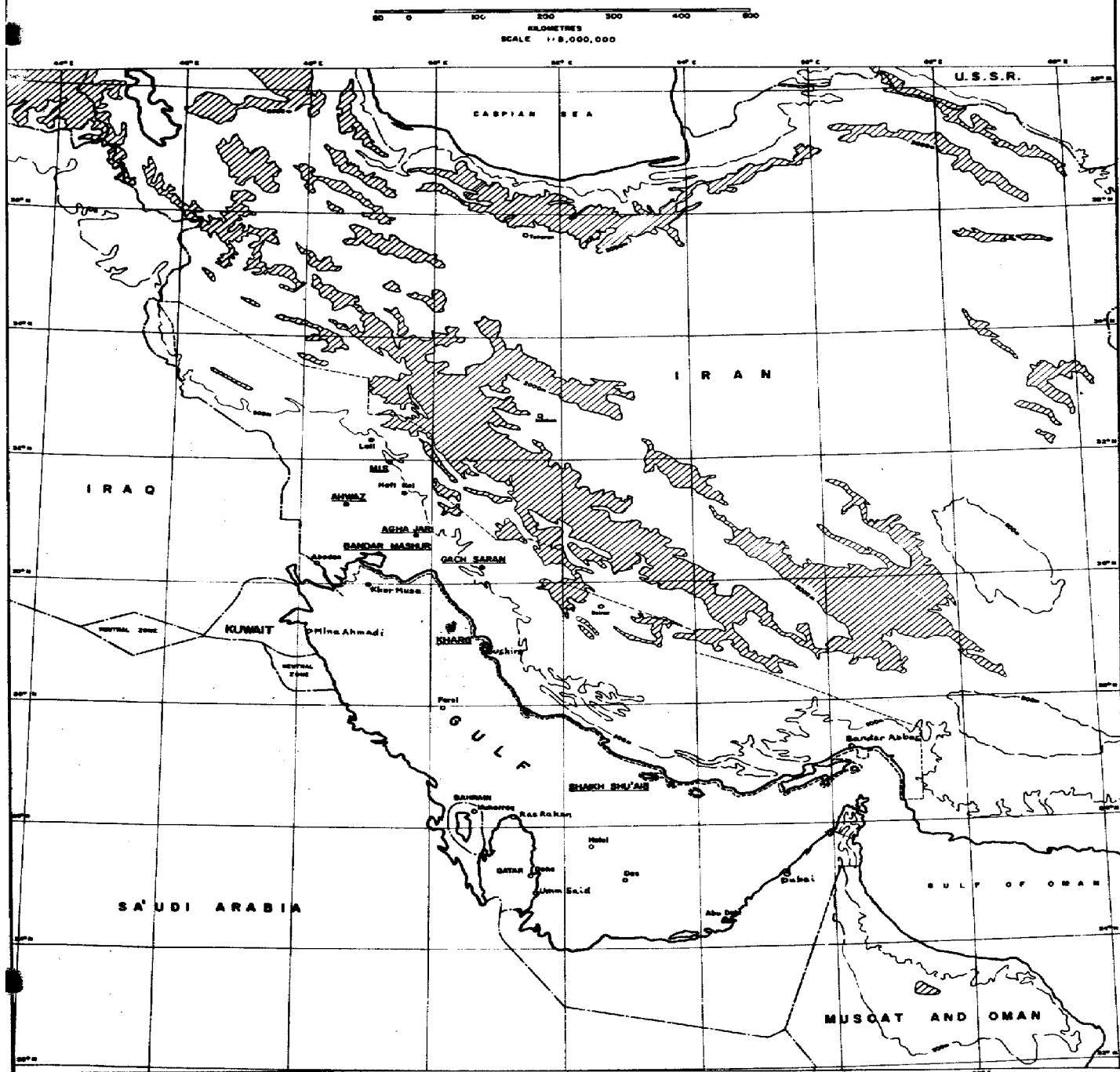
Enclosed, please find 26 copies of "Meteorological Summary for 1963"
to be distributed according to the following list:

General Services Div.	5- copies
P.E.D. Operating CHAM	2- "
" General Engineering	1- "
General Survey Department	1- "
N.I.O.C.	6- . (incl. one for petr. eng. prod. dept.)
✓ Iranian Meteorological Dept.	4- "
Department of Civil Aviation	1- "
Public Relation, IOEAPC H/C	1- "
IMCOS Ltd. London	5- "

cc. The list above

P.J. Hoed
Mr. of Air Services

IRANIAN OIL OPERATING COMPANIES' WEATHER STATIONS.



Weather Station, Company
Weather Station Non-Company
Ground elevation 500 metres ASL
Ground elevation over 3000 metres ASL
Companies' Agreement Boundary
International Boundary

● KHARG

○ Hailuf

YEARLY BULLETIN1963

The Iranian Oil Exploration & Producing Company's Weather Reporting Stations are controlled by Air Services. The technical work has been supervised by a meteorologist from International Meteorological Consultant Services (IMCOS), London. The instruments and the observation procedures used are according to International and Iranian regulations.

The following changes in the meteorological stations have taken place during the year:

Haft Kel closed down 28 February, 1963.

Kut Abdullah was temporary closed down 1 March to 22 April, 1963, and Ahwaz new airport was operating during this period.

Abadan (Company airport) started operating on 4 February, 1963.

Bandar Mashur anemograph was moved from the old airport to Marine Department where it started operating again on 17 July, 1963.

The meteorological data have been utilized for the following purposes:

- For Air Services flight operations.
- By other IOE&PC Divisions and Departments for a great variety of activities.
- For IMCOS' weather forecasting activities in the Gulf area under agreement with the Joint Oil Companies' Meteorological Committee (WROCS).
- For climatological research carried out by IMCOS.
- By Iranian Meteorological Department for forecasting and climatological services in Iran.
- By other Government Meteorological Offices in the Middle East (data broadcast from Teheran according to international agreements).

CONTENTS

Reports from the following stations are included in this bulletin:

Station	International Index Number	Latitude	Longitude	Height AMSL	Page
Masjid-i-Sulaiman (Airport) 1)	40 812	31°59' N	49°16' E	362 m.	9
Agha Jari (Ummidieh airport) 1)	40 833	30°44' N	49°40' E	29 m.	13
Gach Saran (Du Gombadan airport) 1)	40 835	30°20' N	50°50' E	709 m.	17
Kut Abdullah (Airport) 2)	-	31°13' N	48°20' E	15 m.	20
Bandar Mashur (Marine Department) 3)	40 832	30°30' N	49°12' E	3 m.	24
Kharg Island (Airport) 1)	40 845	29°16' N	50°20' E	3 m.	28
Sheikh Shu'aib (Decca Navigator Stn) 3)	40 882	26°48' N	53°22' E	2 m.	32
Abadan (IOE&PC airport) 2)	-	30°22' N	48°13' E	3 m.	22
Khor Musa (Instrument platform) 4)	-	30°00' N	49°02' E	6 m.	36

1) International Synoptic and Climatological Station registered at World Meteorological Organisation, Geneva.

2) Aeronautical and Climatological Station.

3) International Synoptic Station registered at World Meteorological Organisation, Geneva.

4) Wind recording only.

EQUIPMENT

At the end of the year, the stations were equipped with the following meteorological instruments:

	Dry bulb	Wet bulb	Maximum	Minimum	Thermometer	Group	Minimum	Sun Maximum	Thermometer	Hygrograph	Barograph	Anemograph (Dines Mk II)	Anemometer (cup generator)	Rain gauge (portable)	Rain gauge	Recording rain gauge*	Tide gauge*	Wave gauge*
Masjid-i-Sulaiman	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
Agha Jari	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
Gach Saran	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
Kut Abdullah	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
Abadan	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
Bandar Mashur	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
Kharg Island	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
Sheikh Shu'aib	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
Khor Musa	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	

* These instruments are operated by the Department.

** These instruments belong to Khuzestan Development Service, Ahwaz.

REMARKS.Met. Form 2, Rev.

A summary of yearly averages and extremes, number of days of occurrence of temperature, visibility, and other meteorological elements.

Maximum and Minimum Temperature¹

Measured in a thermometer screen about 135 cm above ground. A standard mercury maximum thermometer and a standard spirit minimum thermometer are used.

Ground Minimum Temperature.

Measured by a standard minimum thermometer exposed about 2 cm above ground.

Sea Temperature.

Measured by an ordinary mercury thermometer just below sea surface.

Sun Maximum Temperature.

Measured by a mercury black bulb thermometer in vacuum. The maximum intensity of the solar radiation is measured and expressed in °C. The thermometer is exposed at a height of about 135 cm above ground.

Humidity.

Measured by "dry" and "wet" bulb thermometers (unventilated) in a thermometer screen at a height of approximately 135 cm above ground. For all calculations, Bilham's slide rule has been used.

The daily average of the Relative Humidity is calculated from the observations at 0630, 1230, and 1830 local time.

Vapour Pressure is the partial pressure of the water vapour gas in the atmosphere.

Dew Point Depression is the difference between the shade temperature and the dew point temperature (at which condensation takes place if the air is cooled to that temperature).

During the greater part of the year, the minimum relative humidity occurs, as an average, at about 1530, and the maximum relative humidity at about 1530 local time. However, there may be great variations from this rule, especially in wintertime.

Station Pressure.

The barometer reading reduced to 0°C, standard gravity, and station level. Measured by a Kew type station barometer.

Rainfall.

Measured by 8" rain gauge, the top of which is approximately 70 cm above level ground.

1 mm rainfall is equal to an amount of 1 kg (1 litre) of water per square meter of level ground.

Tr = less than 0.1 mm (Trace).

Wind.

Some stations are equipped with Dines Pressure Tube Anemograph Mk II. The other stations have either a cup generator or a portable anemometer or both (See Equipment).

Horizontal Visibility.

The lowest visibility reported during daytime is used in this frequency table.

Dust.

Includes days with sand- or duststorm and dust suspended in the air if the horizontal visibility has been less than or equal to 1 km.

Thunderstorm.

Includes days with thunderstorm at the station or heard from the station.

Cloudiness.

The total sum of clouds is expressed in eighths of the complete celestial dome.

The Daily Average is calculated from the observations at 0630, 0930, 1230, 1530, and 1830 local time.

Pages 6 and 7.

A summary of deviations from normal values of some meteorological elements.

Page 8.

A summary of averages for the year of temperature, humidity, pressure, etc.

Met. Form 7.

A summary of averages for each month of temperature, humidity, pressure, etc.

Met. Form 4, Rev.

Graphs showing monthly averages and extremes of temperatures, relative humidity and station pressure and monthly totals of rainfall.

Met. Form 8.

Graphs showing prevailing wind directions for each month, and monthly averages of wind speed, dew point depression, and vapour pressure.

Met. Form 5, Rev.

Yearly average wind rose. The wind has been recorded by Dines Pressure Type Anemograph, exposed at about 13 m. above ground.

CONVERSION FACTORS.

The units used in this bulletin are those recommended by World Meteorological Organisation. For the benefit of those who want to use other units, the necessary conversion factors are given below.

Temperature.

$$^{\circ}\text{F} = \frac{5}{9} \cdot ^{\circ}\text{C} + 32$$

Pressure.

$$\begin{aligned} 1 \text{ mb (millibar)} &= 0.0295 \text{ inches Hg} = 0.750 \text{ mm Hg.} \\ 1 \text{ inch Hg} &= 33.86 \text{ mb} = 25.40 \text{ mm Hg.} \end{aligned}$$

Length.

$$\begin{aligned} 1 \text{ mm} &= 0.039 \text{ inches} \\ 1 \text{ m} &= 3.28 \text{ ft} \\ 1 \text{ km} &= 0.621 \text{ statute miles} \end{aligned}$$

Speed.

$$1 \text{ knot} = 0.515 \text{ m/sec} = 1.151 \text{ miles/hr.}$$

T. Bergquist
T. Bergquist
Meteorologist
IMOS Ltd.

IRANIAN OIL COMPANIES										YEARLY WEATHER SUMMARY										Year: 1953									
										Station Pressure (E) at 0930										Local Time: G.M.T. + 3½ hrs									
Temperature		Minimum Temperature		Ground Min. Temperature		Sea Temp.		Sun Maximum Temperature		Humidity		Rainfall		Station Pressure (E)		Maximum Wind Velocity													
Direction		Lowest				Highest				Average				Total															
Velocity																													
Masjid-i-Sultaiman	34.7	18.7	18.2	1.0	-2.9	15.2	-2.9	63.0	77.9	10.2	18.7	35	7.3	62.0	1.4	22.0	1.3	52.0	170	16.7									
Agha Jari	34.1	51.0	16.7	1.0	-3.6	14.7	0.0	67.0	81.2	11.3	16.3	23	5.2	52.0	1.9	19.8	1.5	52.0	170	28.4									
Sach Saran	30.2	46.5	14.0	-1.6	-2.9	13.0	-3.1	61.5	70.5	9.3	13.1	37	9.2	57.0	0.2	23.4	0.2	52.0	170	28.4									
Kut Abdillah	33.0	49.0	16.3	0.8	-3.2	14.5	-2.6	63.5	66.6	12.3	14.5	21	6.2	43.7	1.1	10.9	0.2	52.0	170	28.4									
Abadan	32.8	49.0	17.0	0.4	-2.7	14.7	-1.2	61.5	74.7	12.3	14.7	21	6.2	43.7	1.1	10.6	0.8	52.0	170	28.4									
Dendar Masnur	32.2	48.9	19.1	2.0	-2.3	17.5	2.5	66.0	75.5	16.7	16.7	21	6.2	43.7	1.1	10.5	0.4	52.0	170	28.4									
Kharg Island	29.7	42.0	5.6	21.7	3.0	27.6	19.2	59.0	72.0	15.5	18.0	21	8.0	22.7	1.1	15.6	1.1	52.0	170	16.5									
Sheikh Shatib	30.6	44.0	24.7	22.0	11.0	24.2	18.0	50.0	63.0	15.0	15.0	21	8.0	22.7	1.1	15.6	1.1	52.0	170	16.5									
Kay Masa																													
Station		Temperature		Minimum Temperature		Ground Min. Temperature		Sea Temp.		Date		Date		Date		Date		Date		Date									
Masjid-i-Sultaiman	34.7	18.7	18.2	1.0	-2.9	15.2	-2.9	63.0	77.9	10.2	18.7	35	7.3	62.0	1.4	22.0	1.3	52.0	170	16.7									
Agha Jari	34.1	51.0	16.7	1.0	-3.6	14.7	0.0	67.0	81.2	11.3	16.3	23	5.2	52.0	1.9	19.8	1.5	52.0	170	28.4									
Sach Saran	30.2	46.5	14.0	-1.6	-2.9	13.0	-3.1	61.5	70.5	9.3	13.1	37	9.2	57.0	0.2	23.4	0.2	52.0	170	28.4									
Kut Abdillah	33.0	49.0	16.3	0.8	-3.2	14.5	-2.6	63.5	66.6	12.3	14.5	21	6.2	43.7	1.1	10.9	0.2	52.0	170	28.4									
Abadan	32.8	49.0	17.0	0.4	-2.7	14.7	-1.2	61.5	74.7	12.3	14.7	21	6.2	43.7	1.1	10.6	0.8	52.0	170	28.4									
Dendar Masnur	32.2	48.9	19.1	2.0	-2.3	17.5	2.5	66.0	75.5	16.7	16.7	21	6.2	43.7	1.1	10.5	0.4	52.0	170	28.4									
Kharg Island	29.7	42.0	5.6	21.7	3.0	27.6	19.2	59.0	72.0	15.5	18.0	21	8.0	22.7	1.1	15.6	1.1	52.0	170	16.5									
Sheikh Shatib	30.6	44.0	24.7	22.0	11.0	24.2	18.0	50.0	63.0	15.0	15.0	21	8.0	22.7	1.1	15.6	1.1	52.0	170	16.5									
Kay Masa																													
Number of Days with		Number of Days with		Number of Days with		Number of Days with		Number of Days with		Number of Days with		Number of Days with		Number of Days with		Number of Days with		Number of Days with		Number of Days with									
Temperature		Temperature		Temperature		Temperature		Temperature		Temperature		Temperature		Temperature		Temperature		Temperature		Temperature									
Masjid-i-Sultaiman	1	42	16.2	76	7.1	47	0	122	139	10	10	35	7.3	62.0	1.4	22.0	1.3	52.0	170	16.7									
Agha Jari	0	22	15.2	91	4.7	79	0	125	163	11	11	35	7.3	62.0	1.4	22.0	1.3	52.0	170	28.4									
Sach Saran	1	58	12.5	36	12.2	43	5	115	142	25	11	35	7.3	62.0	1.4	22.0	1.3	52.0	170	28.4									
Kut Abdillah	1	32	14.2	80	59	65	2	100	122	139	2	35	7.3	62.0	1.4	22.0	1.3	52.0	170	28.4									
Abadan	1	27	13.3	81	4.3	75	0	25	160	155	15	14	35	7.3	62.0	1.4	22.0	1.3	52.0	170	28.4								
Suncar Masnur	0	30	12.6	35	7.5	34	0	57	125	116	1	14	35	7.3	62.0	1.4	22.0	1.3	52.0	170	28.4								
Kharg Island	0	28	15.5	16.2	20	9	0	6	150	172	17	19	35	7.3	62.0	1.4	22.0	1.3	52.0	170	16.5								
Sheikh Shatib	0	27	17.5	12.8	5	0	0	64	123	205	0	5	61	24.6	88	0	48	15.5	24.6	20.2	0								

IRANIAN OIL OPERATING COMPANIES	YEARLY WEATHER SUMMARY	Year: 1963
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Table 1. Number of days with.....
 (Normal values in parenthesis).

Abadan	Maximum Temperature $\geq 45.0^{\circ}\text{C}$ (113°F)	43	(47)	79	(58)	13	(4)	65	34	(41)	0	(1)	0	42
	" " $\geq 37.8^{\circ}\text{C}$ (100°F)	129	(144)	146	(157)	115	(116)	140	126	(149)	76	(59)	13	137
	Minimum Temperature $\leq 10.0^{\circ}\text{C}$ (50°F)	81	(66)	96	(73)	124	(108)	104	76	(86)	12	(1)	0	100
	" " $\leq 0.0^{\circ}\text{C}$ (32°F)	0	(1)	0	(0)	5	(2)	2	0	(1)	0	(0)	0	0
	Sun Maximum Temp.	24.7	(23.0)	329	(288)	261	(273)	254	(254)	(254)	10	(59)	4	357
	" " " $\geq 70.0^{\circ}\text{C}$ (158°F)	119	(100)	152	(137)	111	(121)	168	(122)	(122)	10	(59)	4	96
	Rainfall $\geq 0.1 \text{ mm}$	43	(40)	34	(24)	47	(32)	31	28	(32)	29	(23)	15	21
	" $\geq 1.0 \text{ mm}$	36	(34)	26	(22)	32	(27)	25	16	(25)	17	(24)	15	16
	" $\geq 10.0 \text{ mm}$	9	(12)	6	(9)	10	(9)	5	3	(6)	4	(6)	2	5
	" $\geq 1.0 \text{ inch}$	2	(5)	1	(1)	3	(3)	2	1	(1)	1	(1)	1	2
	Wind maximum $\geq 17 \text{ kts}$ (10 mph)	182	(158)	231	(206)			209	(225)	192(211)	151	151	151	231
	" $\geq 26 \text{ kts}$ (15 mph)	62	(44)	106	(59)			122	(87)	65 (78)	58	58	58	91
	" $\geq 35 \text{ kts}$ (20 mph)	20	(12)	39	(11)			31	(24)	13 (19)	24	24	24	22

The normal values have been calculated from the following periods:
Mesjid-i-Suleiman (Airport): Temperature and rainfall 1951-1962.
Agha Jeri: 1957-1962.
Gach Saran: 1958-1962.
Bundar Nashir: 1957-1962.
Khara Island: 1959-1962.

IRANIAN OIL OPERATING COMPANIES	YEARLY WEATHER SUMMARY	Year: 1963
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Table 2.

Difference between the 1963 averages and the normal values for some of Fields stations.
(+ = higher than normal; - = lower than normal).

	Maxim. temperature °C	Min. temperature °C	Sum. Maximum Temp. °C	Relative Humidity (Daily Average) %	Station Pressure mb	Rainfall % of normal
Masjid-i-Sulaiman	+0.0	+0.9	-	-6	-0.3	70
Agha Jari	+0.9	+1.6	-3.3	+1		79
Gach Saran	+0.1	-1.6	-1.3		-0.5	112
Abadan	+0.2	-0.4		-7	+0.1	98
Bender Mashur	-0.4	+1.2				70
Kharg Island	+0.7	+0.5	-0.1		-0.3	60

Table 3.

Difference between monthly average and the normal values of daily average temperature.
Average for Fields area calculated from readings at Mashid-i-Sulaiman, Agha Jari, Gach
Saran, Abadan, and Kharg Island.
(+ = warmer than normal; - = colder than normal).

January	+1.7 °C
February	+3.7
March	-0.9
April	+0.0
May	-3.4
June	+0.2
July	+0.7
August	+0.3
September	+0.3
October	+0.8
November	-0.5
December	-2.4
Year	+0.0°C

IRANIAN OIL OPERATING COMPANIES	YEARLY WEATHER SUMMARY	Year: 1963 All Stations.
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	Temperature °C												Dew Point Depr. °C							
	Average	Average	Average	Average	Highest	Average	Lowest	Average	Lowest	Average	Lowest	Average	Gr. Month. Av.	Gr. Month. Av.	Sum Max. 1/(Max+Min)	Sum Max. 1/(Max+Min)	0630 0930 1230 1830	Average	Average	Average
	0630	1230	1830	Max.	Max.	Min.	Min.	Min.	Min.	Max.	Max.	Max.	0630	0930	1230	1830	0630 0930 1230 1830	Average	Average	Average
MIS	20.0	29.6	28.0	31.7	48.7	18.2	1.0	15.2	-2.9	63.0	77.8	25.0	13.3	18.7	24.6	23.4				
AJ	18.4	31.6	30.4	34.1	51.0	16.7	1.4	14.7	0.0	67.0	83.9	25.5	11.4	18.3	26.8	26.6				
GS	15.1	28.2	25.3	30.2	46.5	14.0	-1.7	13.0	-3.1	61.2	80.6	22.1	10.2	18.4	26.8	23.6				
KA	17.6	30.6	28.8	33.0	49.4	16.3	-0.8	14.6	-2.6	63.6	86.6	24.7	8.3	14.5	23.8	21.9				
Abn	19.4	30.4	23.6	32.8	49.0	17.8	0.4	-	-1.3	-	-	25.3	8.5	14.5	22.5	19.1				
BM	19.7	29.6	27.8	32.2	48.9	19.1	2.2	17.6	2.0	-	-	25.6	6.6	11.0	17.8	14.6				
Khg	22.8	28.1	26.5	29.7	42.5	21.7	8.0	19.2	3.6	59.4	72.0	25.6	5.7	8.7	11.4	9.7				
ShSh	23.9	29.2	26.6	30.4	44.2	22.0	11.4	18.2	5.2	66.0	77.9	26.2	3.7	8.1	9.2	6.8				

	Vapour Pressure mb				Relative Humidity %						Precipitation mm					
	Average	Average	Average	Average	0630	0630	1230	1830	Average	Average	Lowest	Average	Daily Aver.	Monthly % of Total normal	24 hr. Max.	
	0630	0930	1230	1830	0630	0630	1230	1530	1530	1830	1830	Aver.				
MIS	10.1	10.2	9.3	9.1	48	100	28	33	2	31	35	301.1	70	38.1		
AJ	11.8	11.2	9.6	8.8	52	90	25	20	1	27	34	164.2	79	29.1		
GS	9.2	9.2	7.3	7.8	57	100	27	22	1	31	37	300.3	112	38.6		
KA	12.0	12.8	10.6	10.5	62	98	29	24	3	33	41	193.1	43.5			
Abn	14.2	13.6	11.6	12.7	64	30	26	5	40	43	177.2	98	57.9			
BM	16.4	16.7	14.9	16.5	68	100	38	32	2	46	51	127.9	70	33.2		
Khg	21.6	21.7	20.2	20.4	75	98	52	51	15	58	61	92.7	60	16.6		
ShSh	25.1	24.8	25.0	24.9	81	100	60	60	20	67	69	111.5	55.0			

	Station Pressure mb				Wind Velocity kts				Visibility km			Cloudiness /%			
	Average	Average	Average	Average	0630	1230	1830	Max.	Average	Average	Average	Average	Average	Average	
	0630	0930	1230	1830	0630	1230	1830	Max.	0630	1230	1830	0630	1230	1830	
MIS	968.3	969.4	968.8	967.5	1.8	6.0	4.5	19	17	22	24	2.1	2.5	2.4	
AJ	1007.6	1008.6	1007.8	1006.4	2.8	7.8	8.8	22	23	25	26	2.0	2.1	2.1	
GS	929.0	930.0	929.2	928.1	1.2	7.6	9.0	18	21	20	20	2.0	2.1	2.0	
KA	1008.0	1009.2	1008.4	1007.1	5.6	9.7	8.9	21	24	22	1.6	1.9	1.8		
Abn	1010.7	1010.8	1010.1	1009.8	3.3	9.6	6.0	15	16	17	17	1.5	1.7	1.9	
BM	1009.3	1010.5	1009.7	1008.2	4.8	8.3	7.9	21	22	23	22	2.0	2.2	2.1	
Khg	1009.2	1010.1	1009.6	1008.2	5.4	8.8	7.3	18	19	20	20	1.8	1.7	1.6	
ShSh	1008.9	1010.3	1009.3	1008.2	4.1	7.2	5.7	18	25	27	23	2.1	1.9	2.0	
KhM								21							

Abbreviations: MIS = Masjid-i-Sulaiman
AJ = Agha Jari
GS = Gach Saran
KA = Kut Abdullah
Abn = Abadan
BM = Bandar Mashur
Khg = Kharg Island
ShSh = Sheikh Shu'aib
KhM = Khor Musa

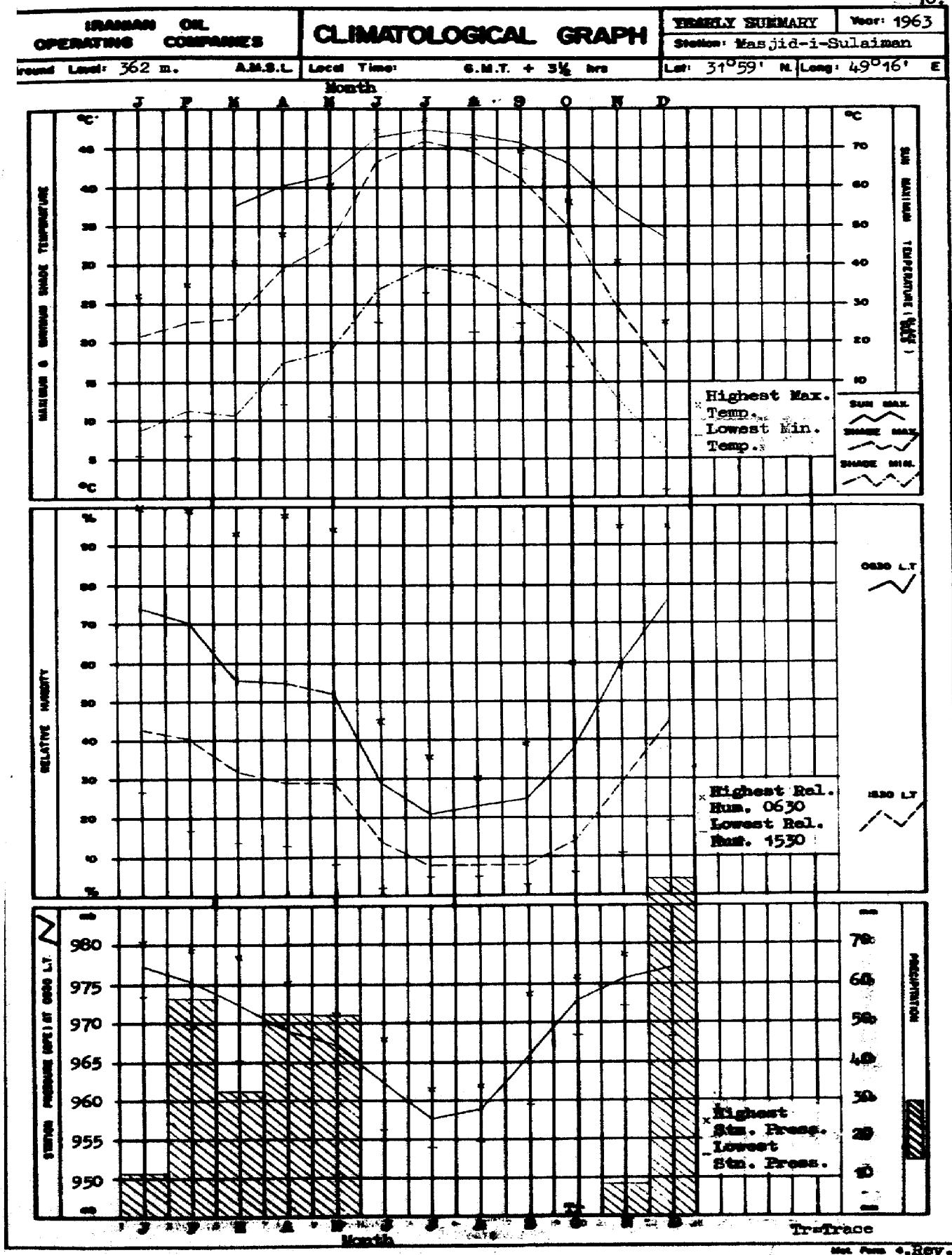
IRANIAN OIL OPERATING COMPANIES	YEARLY WEATHER SUMMARY	Year: 1963 Station: Masjid-i-Sulaiman
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	Temperature °C												Dew Point Depr. °C				
	Average	Average	Average	Average	Highest	Average	Lowest	G. Average	G. Lowest	Sun.	Sun.	Month. Av.	Average	Average	Average	Average	Average
	0630	1230	1830	Max.	Max.	Min.	Min.	Min.	Min.	Max.	Max.	1/2 (Max+Min)	0630	0930	1230	1830	
January	10.5	18.2	16.6	20.7	26.1	8.7	5.5	6.2	4.8	14.7	14.7	14.7	4.7	6.2	11.2	10.1	
February	13.2	20.2	18.7	22.6	27.5	11.3	8.0	9.3	5.5	17.0	17.0	17.0	5.4	7.7	13.1	12.0	
March	12.7	20.7	19.5	23.2	30.5	10.6	5.1	8.2	3.5	55.2	62.0	55.2	16.9	9.0	12.4	17.4	17.0
April	19.5	27.4	26.2	29.6	34.0	17.5	12.1	14.8	9.5	60.2	67.2	60.2	23.6	10.1	14.2	20.5	18.9
May	21.5	29.7	29.0	33.0	40.1	19.0	10.4	16.9	9.7	63.1	74.9	63.1	26.0	11.3	16.7	21.4	22.4
June	28.9	40.9	40.4	43.2	47.3	26.8	22.7	23.3	18.4	72.8	77.3	72.8	35.0	20.5	28.1	33.8	35.8
July	31.7	43.8	43.1	46.1	46.7	29.9	26.6	26.8	22.9	74.9	77.8	74.9	38.0	25.5	34.0	41.1	42.4
August	30.5	42.8	42.1	44.7	46.6	28.9	21.4	28.1	17.6	73.6	75.4	73.6	36.8	23.5	31.0	38.4	39.6
September	26.6	39.7	37.4	41.2	44.6	25.4	22.6	20.4	17.2	71.2	73.4	71.2	33.3	21.9	31.7	39.0	36.4
October	22.6	33.5	30.2	35.0	38.4	21.2	17.0	17.5	13.3	66.3	72.0	66.3	28.1	15.8	22.9	29.9	24.5
November	14.1	23.1	19.9	24.8	30.6	12.8	7.3	9.6	3.2	55.1	60.0	55.1	18.8	7.9	12.9	19.0	14.3
December	8.1	15.4	12.8	16.6	22.7	6.2	1.0	4.0	-2.9	47.3	54.2	47.3	11.4	4.4	6.7	11.2	6.9
Year	20.0	29.6	28.0	31.7	48.7	18.2	1.0	15.2	-2.9	63.0*	77.8	63.0*	25.0	13.3	18.7	24.6	23.4

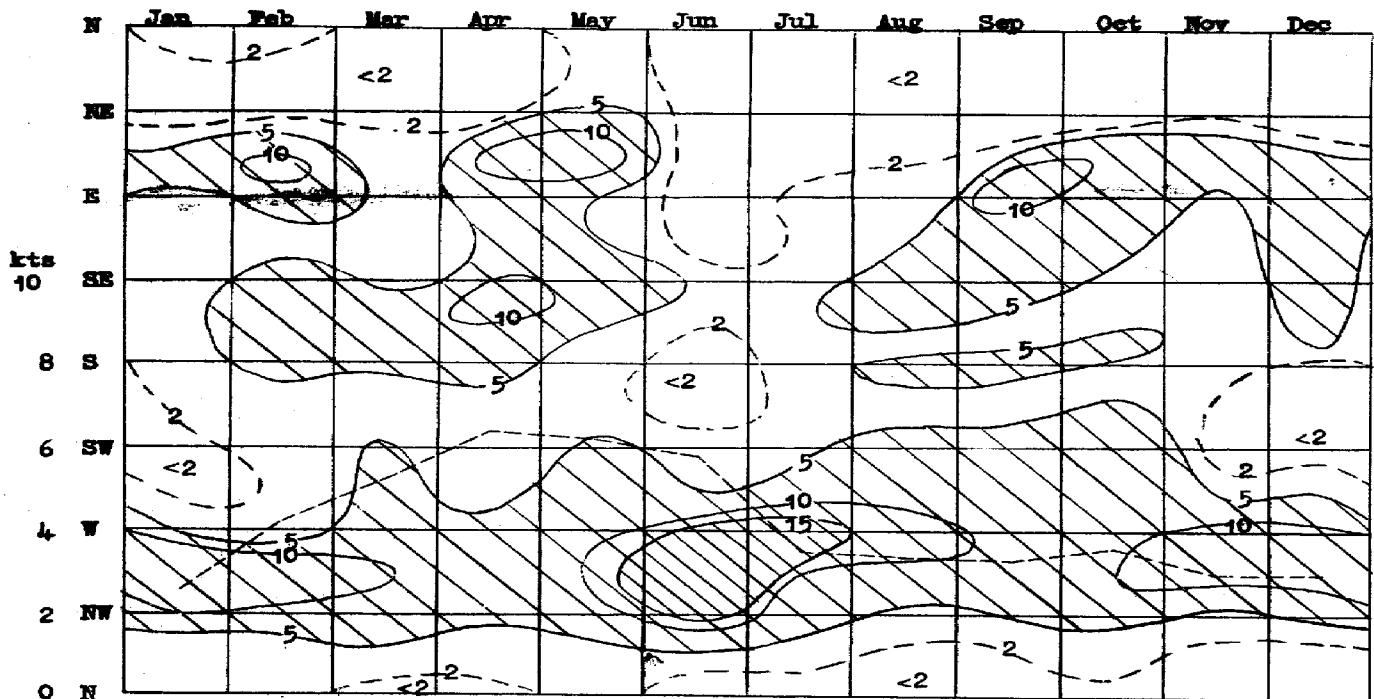
	Vapour Pressure mb				Relative Humidity %							Precipitation mm				
	Average	Average	Average	Average	Average	0630	0630	1230	1530	1530	1830	Daily Aver.	Monthly Total	% Of normal	24 hr. Max.	
	0630	0930	1230	1830	0630	0630	1230	1530	1530	1830	Daily Aver.					
January	9.4	10.3	10.3	9.9	74	100	51	43	27	53	59	11.4	11	8.9		
February	10.5	11.0	10.4	10.2	70	99	45	40	17	48	54	56.5	36	33.1		
March	8.3	9.1	8.2	7.8	56	93	34	32	14	36	42	32.6	60	18.3		
April	12.1	12.4	10.6	10.7	55	98	32	29	13	34	40	52.7	97	21.0		
May	12.7	12.5	11.3	10.3	52	94	30	29	8	30	38	52.2	653	20.6		
June	11.1	11.6	11.7	10.1	29	45	16	14	2	14	20	0	-	0		
July	9.6	9.1	7.6	6.7	21	30	9	8	5	7	12	0	-	0		
August	10.6	10.6	9.0	7.8	23	36	12	8	5	9	14	0	-	0		
September	8.7	7.9	6.7	6.8	25	39	9	8	3	10	15	0	-	0		
October	10.2	9.6	8.1	9.5	38	60	16	14	6	22	25	14	17	14		
November	9.9	9.9	8.7	9.6	60	95	30	29	11	40	43	8.7	17	3.8		
December	8.2	8.7	8.5	9.6	76	95	49	45	19	65	63	87.0	103	38.1		
Year	10.1	10.2	9.3	9.1	48	100	28	33	2	31	35	301.1	70	38.1		

	Station Pressure mb				Wind Velocity kts				Visibility km			Cloudiness /8			
	Average	Average	Average	Average	Average	0630	1230	1830	Max.	0630	1230	1830	0630	1230	1830
	0630	0930	1230	1830	Average	0630	1230	1830	Max.	0630	1230	1830	0630	1230	1830
January	975.9	977.4	976.1	975.2	1.5	4.0	2.2	14	15	19	25	2.5	4.5	3.3	
February	974.3	975.3	974.4	973.3	2.6	7.2	2.7	20	16	25	25	4.7	4.6	4.8	
March	971.7	972.5	972.2	970.8	1.7	8.5	5.7	20	14	22	22	3.3	3.3	3.4	
April	968.0	969.1	968.8	967.1	4.2	8.1	6.8	24	19	23	23	4.0	4.8	5.7	
May	966.2	967.2	966.9	965.4	4.2	8.4	5.9	24	21	29	27	2.5	4.0	3.6	
June	961.9	962.5	962.3	961.1	0.8	7.4	9.1	21	14	17	20	0.0	0.0	0.0	
July	957.0	957.8	957.5	956.0	0.0	4.0	6.4	18	11	15	20	0.6	0.4	0.3	
August	958.0	959.0	958.9	957.2	0.3	4.8	5.0	17	15	19	21	0.4	0.1	0.0	
September	965.1	966.1	965.6	964.4	1.0	5.3	3.6	17	19	24	28	0.2	0.1	0.1	
October	971.2	972.7	971.6	970.7	1.2	5.1	2.4	16	17	21	24	1.7	2.7	2.4	
November	974.3	975.7	974.7	974.1	1.2	5.3	2.5	15	23	24	30	2.2	2.4	2.2	
December	975.7	977.1	976.0	975.5	2.8	4.2	2.0	18	17	21	21	2.6	2.7	2.6	
Year	968.3	969.4	968.8	967.5	1.8	6.0	4.5	19	17	22	24	2.1	2.5	2.4	

* Average obtained by climatological comparison with Agha Jari

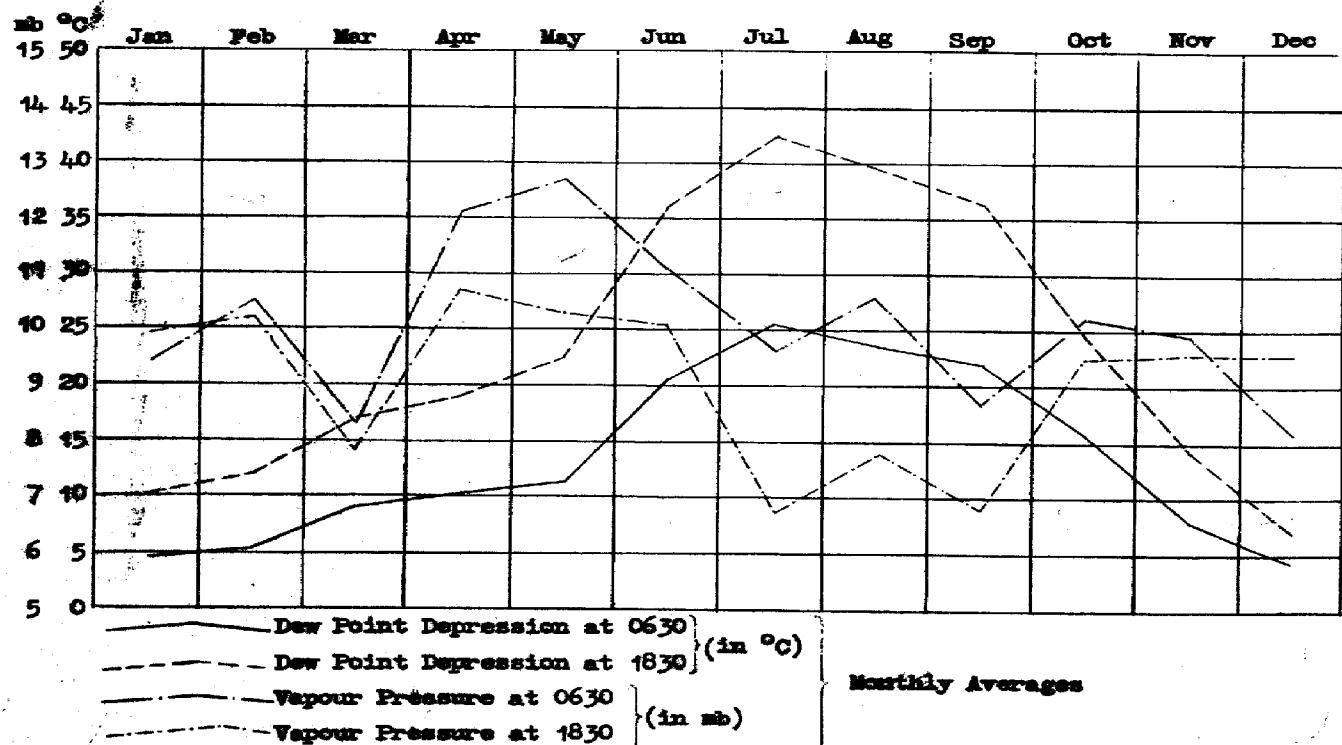


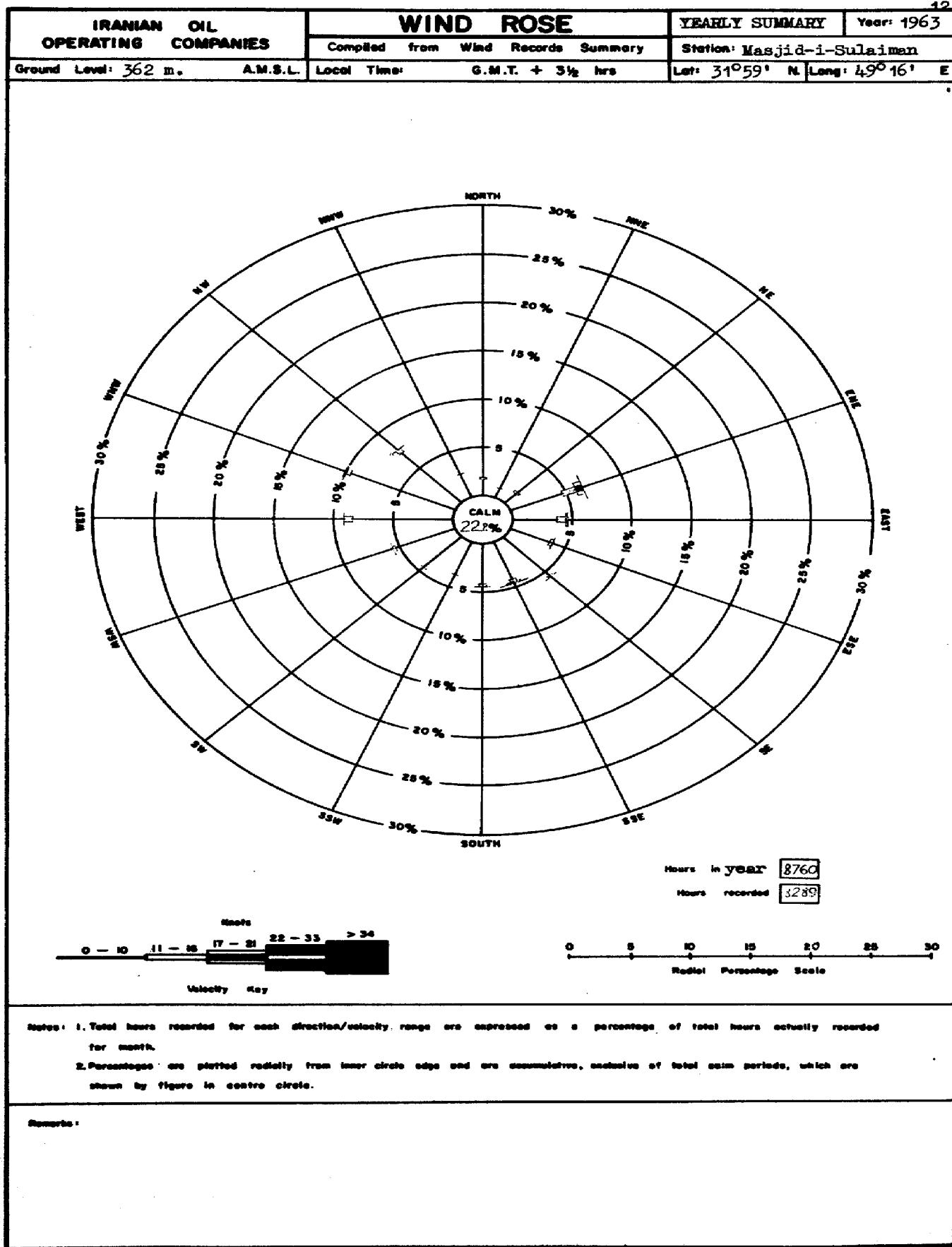
IRANIAN OIL OPERATING COMPANIES	YEARLY WEATHER SUMMARY	Year: 1963 Station: Masjid-i-Sulaiman
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Precipitating Wind Direction for each month (in % of monthly total number of cases).

— Monthly average of wind speed (average of 0630, 1230, and 1830 observations).





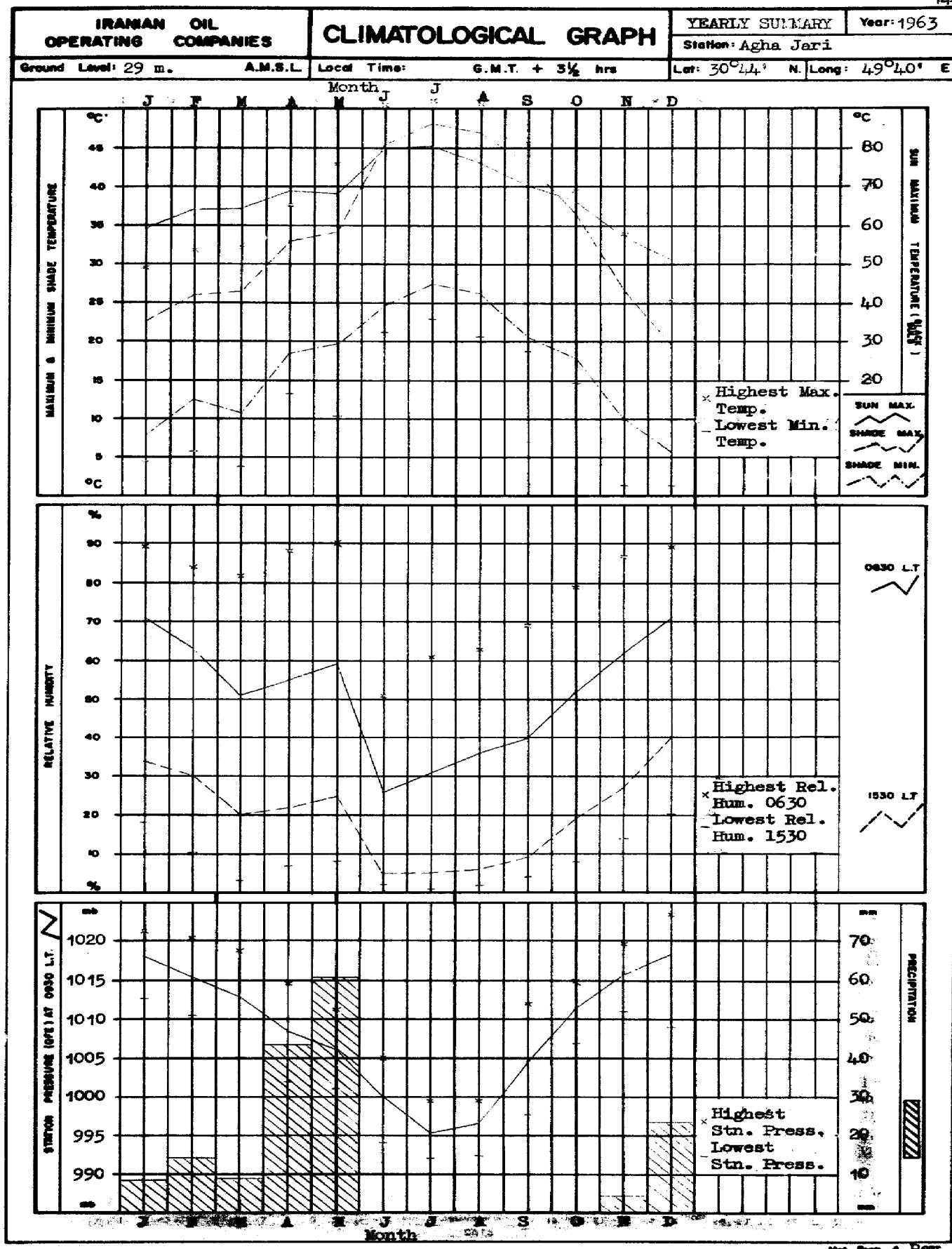
IRANIAN OIL OPERATING COMPANIES	YEARLY WEATHER SUMMARY	Year: 1963 Station: Agha Jari
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	Temperature °C												Dew Point Depr. °C						
	Average	Average	Average	Average	Highest	Average	Lowest	Average	%	Gr. Lowest	Average	Highest	Sun. Min.	Sun. Max.	Month. Av.	Average	Average	Average	Average
	0630	1230	1830	Max.	Max.	Min.	Min.	Min.	Min.	Max.	Max.	Max.	(Max+Min)	0630	0930	1230	1830		
January	9.4	20.3	18.8	22.6	29.6	8.0	4.4	7.0	3.4	59.3	67.2	15.3	5.3	8.7	14.2	12.4			
February	13.7	23.8	22.1	26.0	31.9	12.4	5.8	9.5	3.6	64.1	72.2	19.2	7.5	10.8	18.7	16.0			
March	12.4	23.5	22.7	26.4	32.5	10.8	3.8	8.7	1.6	64.5	75.6	18.6	10.4	16.4	22.3	22.7			
April	20.0	30.7	29.4	33.0	37.7	18.5	13.2	15.2	10.2	68.8	76.1	25.8	10.4	17.3	24.5	23.9			
May	21.9	32.2	31.8	34.1	43.0	19.7	10.4	16.3	7.5	68.3	79.0	26.9	9.3	16.5	22.4	23.6			
June	26.3	42.5	42.9	45.6	50.5	24.7	21.3	18.6	14.2	80.0	83.9	35.2	19.8	32.4	49.5	45.4			
July	29.2	43.9	46.0	48.1	51.0	27.4	23.0	24.8	8.3	83.8	87.8	19.7	29.9	38.8	48.7				
August	27.6	44.0	44.1	47.1	50.6	26.4	20.6	24.8	20.4	76.0	80.1	36.8	16.5	26.0	39.3	33.4			
September	22.0	40.1	38.5	42.9	45.7	20.7	18.9	19.6	17.4	69.9	78.8	31.8	14.9	23.7	34.2	34.3			
October	19.3	34.8	33.7	36.8	39.5	18.9	14.8	17.5	13.6	62.6	72.7	30.2	10.8	18.1	26.3	24.2			
November	11.5	24.9	21.6	26.9	34.0	10.0	1.4	9.2	1.3	57.6	67.4	18.5	7.4	12.9	18.8	15.8			
December	7.5	17.4	14.7	19.8	25.6	5.7	1.4	4.2	0.0	51.4	60.5	12.8	5.1	7.3	11.9	8.2			
Year	18.4	31.6	30.4	34.1	51.0	16.7	1.4	14.7*	0.0	67.0	83.9	25.5	11.4	18.3	26.8	26.6			

	Vapour Pressure mb				Relative Humidity %								Precipitation mm				
	Average	Average	Average	Average	Average	Highest	Average	Average	Lowest	Average	Daily Aver.	Monthly Total	% of normal	24 hr. Max.			
	0630	0930	1230	1830	0630	0630	1230	1530	1530	1830	Aver.						
January	8.3	9.0	9.7	9.7	71	89	42	34	18	46	53	8.6	13	8.6			
February	9.8	10.5	9.2	9.8	63	84	32	30	10	39	45	14.3	62	5.8			
March	7.3	7.8	7.2	6.7	52	82	26	20	3	25	34	9.1	33	4.3			
April	12.8	12.4	10.2	10.1	55	88	25	22	7	27	36	43.3	210	17.0			
May	16.9	14.5	12.6	12.3	59	90	30	25	8	29	39	60.9	734	29.1			
June	10.0	9.3	6.3	5.4	26	51	8	5	2	7	15	0	-	0			
July	12.5	11.6	9.7	5.2	31	61	11	5	1	5	16	0	-	0			
August	13.3	14.5	9.2	6.9	36	63	10	6	2	8	18	0	-	0			
September	10.5	12.6	9.6	8.4	40	69	13	9	4	13	22	0	-	0			
October	11.9	13.9	11.8	11.4	52	79	21	19	8	25	32	0	-	0			
November	8.9	9.7	9.8	9.9	62	87	31	27	14	38	43	4.4	11	2.6			
December	7.6	8.8	9.3	10.0	71	89	47	40	20	59	59	23.6	65	14.9			
Year	11.8	11.2	9.6	8.8	52	90	25	20	1	27	34	164.2	79	29.1			

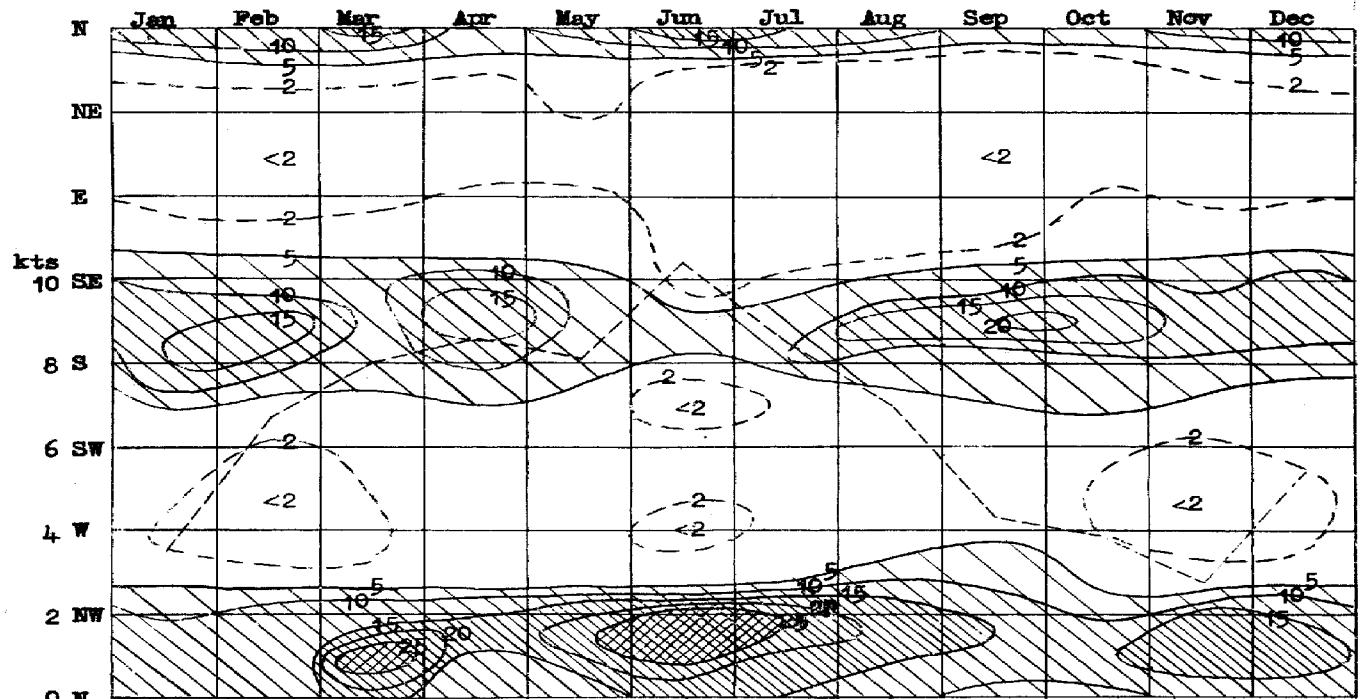
	Station Pressure mb				Wind Velocity kts				Visibility km			Cloudiness /8		
	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average
	0630	0930	1230	1830	0630	1230	1830	Max.	0630	1230	1830	0630	1230	1830
January	1016.5	1018.1	1016.6	1015.6	2.4	4.3	3.9	16	20	22	27	1.9	3.9	3.1
February	1014.5	1015.5	1014.5	1013.3	4.3	8.2	7.5	20	26	28	29	4.1	4.4	4.5
March	1012.0	1013.1	1012.4	1010.6	3.7	9.6	10.7	27	24	25	25	3.1	3.1	2.5
April	1007.2	1008.5	1007.9	1006.0	4.7	10.4	10.8	29	21	23	24	4.3	4.5	5.1
May	1005.2	1006.2	1005.7	1004.3	3.7	8.6	12.0	27	24	23	24	2.4	2.7	2.2
June	999.6	1000.0	999.6	997.7	2.4	11.8	17.1	29	20	18	18	0.0	0.0	0.0
July	995.4	995.4	994.8	992.8	2.3	8.6	14.7	21	16	20	23	1.2	0.6	0.3
August	995.7	996.6	995.9	993.9	2.5	7.8	10.7	21	27	27	29	0.7	0.0	0.3
September	1003.3	1004.5	1003.7	1002.9	1.1	5.3	6.5	16	27	28	29	0.1	0.0	0.3
October	1010.0	1011.4	1010.3	1009.0	1.0	5.7	5.0	15	22	24	26	1.6	1.7	2.5
November	1014.4	1015.8	1014.7	1013.7	0.9	5.4	2.2	16	31	36	35	2.2	2.5	2.0
December	1016.9	1018.3	1017.2	1016.5	4.4	7.5	4.4	22	23	26	28	1.9	2.3	2.5
Year	1007.6	1008.6	1007.8	1006.4	2.8	7.8	8.8	22	23	25	26	2.0	2.1	2.1

* Average obtained by climatological comparison with Masjid-i-Sulaiman



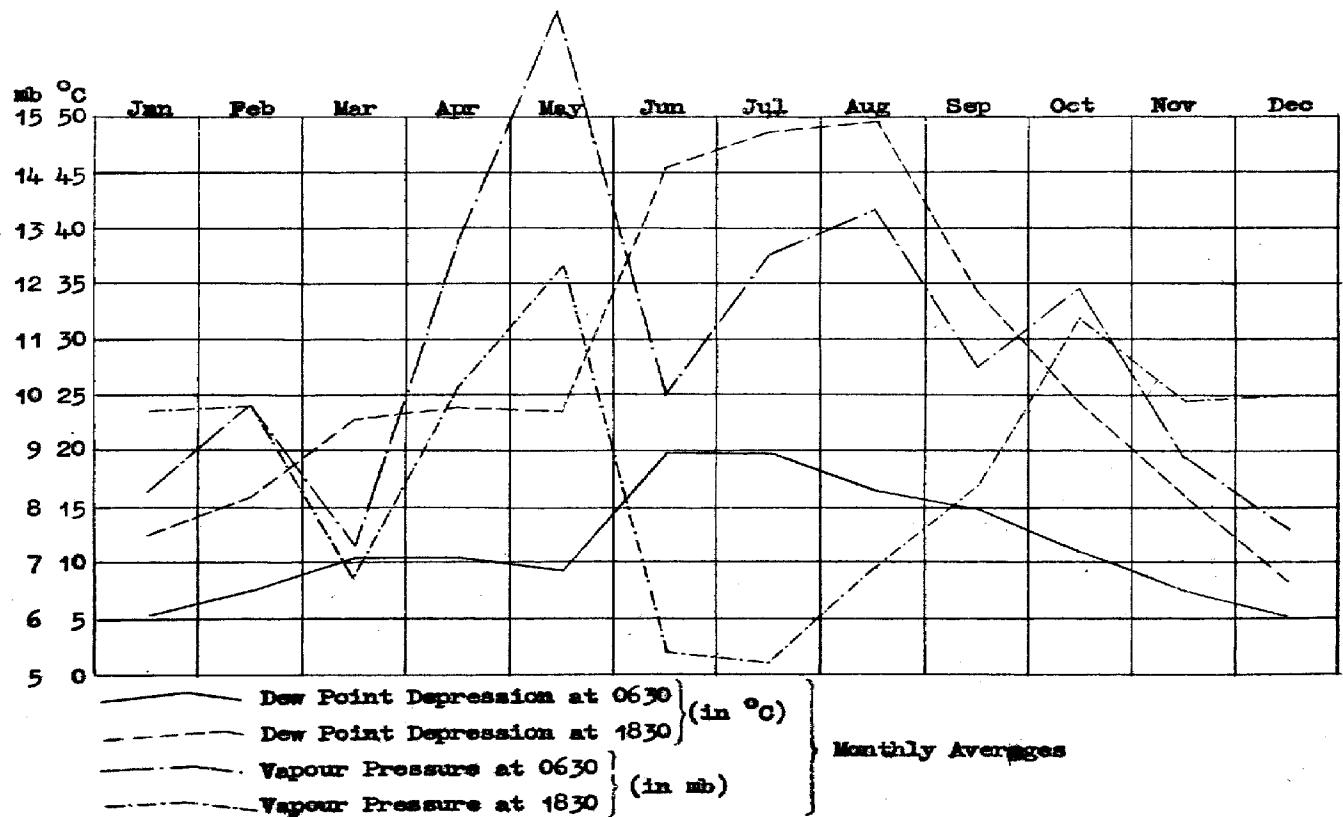
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IRANIAN OIL OPERATING COMPANIES	YEARLY WEATHER SUMMARY	Year: 1963 Station: Agha Jari
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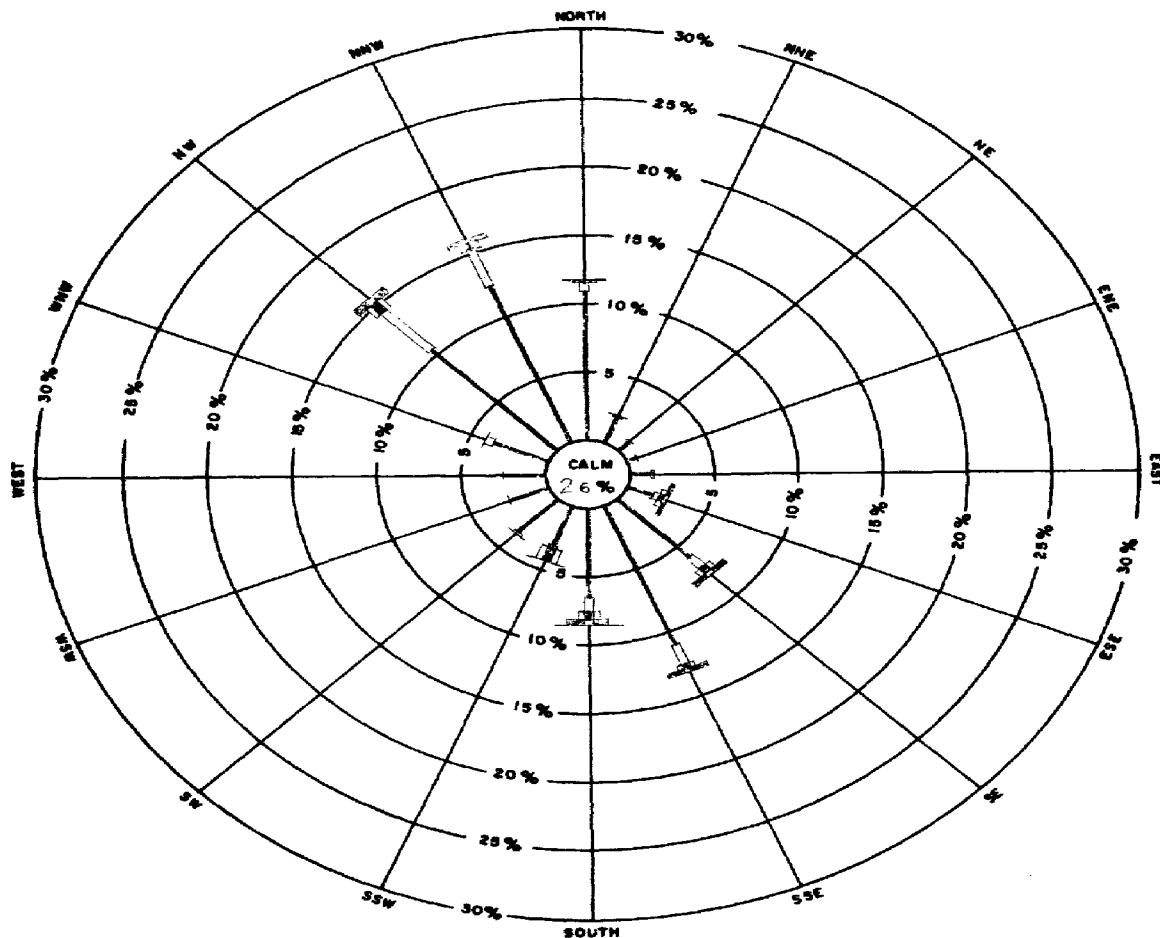
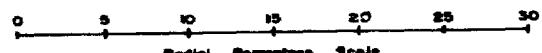
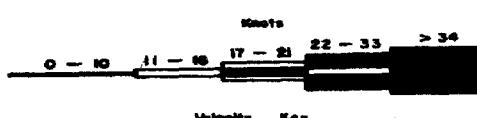


Prevailing Wind Direction for each month (in % of monthly total number of cases).

— Monthly average of wind speed (average of 0630, 1230, and 1830 observations).



IRANIAN OIL OPERATING COMPANIES	WIND ROSE	YEARLY SUMMARY	Year: 1963
Ground Level: 29 M. A.M.S.L.	Compiled from Wind Records Summary	Station: Agha Jari	
	Local Time: G.M.T. + 3½ hrs	Lat: 30°44' N Long: 49°40' E	

Hours in year 8760Hours recorded 3548

Notes: 1. Total hours recorded for each direction/velocity range are expressed as a percentage of total hours actually recorded for month.
 2. Percentages are plotted radially from inner circle edge and are accumulative, exclusive of total calm periods, which are shown by figure in centre circle.

Remarks:

IRANIAN OIL OPERATING COMPANIES	YEARLY WEATHER SUMMARY	Year: 1963 Station: Gach Saran
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	Temperature °C												Dew Point Degr. °C								
	Average	Average	Average	Average	Highest	Average	Lowest	Average	Lowest	Average	Highest	Gr.	Gr.	Sun	Sun	Month. Av.	Dew Point Degr. °C	0630	0930	1230	1830
	0630	1230	1830	Max.	Max.	Min.	Min.	Min.	Min.	Max.	Max.	Max.	Min.	Min.	Max.	Max.	½ (Max+Min)	0630	0930	1230	1830
January	5.0	18.4	14.8	20.3	26.1	3.8	-1.1	2.6	-2.0	52.0	60.5	12.1	4.1	9.7	18.3	12.4					
February	10.0	19.3	17.3	21.5	26.5	8.6	3.4	7.4	2.5	51.9	60.0	15.1	4.9	9.0	15.7	13.9					
March	9.0	19.9	14.2	22.5	27.8	7.8	-0.6	6.4	-2.3	55.4	65.2	15.2	7.9	14.5	21.4	16.3					
April	15.3	25.8	24.4	28.3	32.8	14.0	8.8	13.0	7.6	61.5	67.8	21.2	6.1	12.4	17.4	16.1					
May	17.4	27.9	26.7	30.6	38.4	15.7	9.3	14.5	9.4	62.0	71.0	23.2	6.8	14.3	20.2	19.0					
June	23.2	38.9	37.4	40.8	45.0	21.9	17.1	20.6	15.6	72.7	76.0	31.4	17.3	29.3	41.2	42.5					
July	26.2	41.4	39.7	43.7	46.5	24.8	22.0	24.0	20.8	74.5	79.8	34.3	21.1	35.1	44.1	43.6					
August	25.0	40.4	38.4	42.4	45.4	24.0	19.4	23.3	18.5	73.6	80.6	33.2	19.2	30.4	41.3	40.4					
September	19.6	37.1	33.9	38.8	42.6	19.0	16.5	18.4	16.0	69.8	73.0	28.9	17.9	29.6	41.5	36.5					
October	15.8	31.6	27.7	33.2	36.4	15.4	11.4	14.8	11.2	64.2	67.7	24.3	10.6	20.6	30.4	23.8					
November	10.4	21.7	17.6	23.3	30.3	9.5	2.2	8.6	1.1	52.3	63.5	16.4	4.1	10.1	16.6	11.3					
December	4.6	14.9	11.2	17.4	23.0	3.2	-1.7	2.3	-3.1	44.5	53.2	10.3	2.3	5.9	13.8	7.2					
Year	15.1	28.2	25.3	30.2	46.5	14.0	-1.7	13.0	-3.1	61.2	80.6	22.1	10.2	18.4	26.8	23.6					

	Vapour Pressure mb				Relative Humidity %								Precipitation mm				
	Average	Average	Average	Average	Average	Highest	Average	Average	Lowest	Average	Daily Aver.	Monthly Total	% of normal	24 hr. Max.			
	0630	0930	1230	1830	0630	0630	1230	1530	1530	1830	Aver.						
January	6.6	7.4	6.4	7.5	77	100	31	27	10	45	51	2.2	3	1.0			
February	9.0	9.5	8.2	8.3	75	97	39	33	9	45	53	50.3	34	20.3			
March	7.1	7.3	5.9	6.3	60	97	27	24	2	31	37	13.6	16	4.7			
April	11.9	12.3	11.5	11.1	68	95	37	33	15	38	48	22.9	80	0.1			
May	13.2	13.0	11.3	11.5	69	100	32	32	7	35	45	107.8	234.4	38.6			
June	9.5	8.5	5.5	4.5	34	60	8	6	1	7	16	0	-	0			
July	9.2	8.0	5.4	5.2	28	43	7	5	2	7	14	0	-	0			
August	9.7	9.5	6.1	5.8	30	70	8	6	2	9	16	0	-	0			
September	7.0	7.2	4.6	5.4	31	48	7	6	2	11	16	0	-	0			
October	9.4	9.6	6.9	8.8	50	88	15	13	5	24	30	0	-	0			
November	9.9	10.6	9.2	10.1	78	98	38	35	10	51	55	38.8	126	19.6			
December	7.5	7.9	6.9	8.4	86	100	69	39	11	64	64	84.7	146	31.0			
Year	9.2	9.2	7.3	7.8	57	100	27	22	1	31	37	300.3	112	38.6			

	Station Pressure mb				Wind Velocity kts				Visibility km			Cloudiness /8			
	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average
	0630	0930	1230	1830	0630	1230	1830	Max.	0630	1230	1830	0630	1230	1830	
January	935.2	936.6	935.0	934.7	9.2	4.6	3.6		20	26	24	1.9	2.6	3.3	
February	933.9	935.1	934.1	933.3	2.6	6.9	6.5		21	23	22	4.1	4.6	4.3	
March	931.6	932.3	931.6	930.1	1.5	9.9	9.4		16	18	19	3.3	3.4	3.4	
April	928.9	929.9	929.3	927.9	2.8	9.0	9.0		18	20	18	3.8	4.0	3.6	
May	927.1	927.9	927.4	926.0	2.2	9.1	10.5		19	21	20	2.5	2.9	2.2	
June	923.6	924.2	923.5	921.9	0.4	10.0	13.5		13	15	14	0.1	0.1	0.1	
July	919.6	920.2	919.5	918.3	0.3	8.6	13.3		13	15	14	1.0	0.7	0.8	
August	920.6	921.3	920.7	919.4	0.5	9.5	13.5		16	18	16	0.2	0.3	0.2	
September	927.0	928.0	927.1	926.2	0.0	7.0	10.7		19	22	20	0.0	0.1	0.0	
October	931.7	933.5	932.9	931.5	0.2	6.3	8.2		20	24	21	1.6	1.8	1.9	
November	934.3	935.4	934.0	933.4	0.4	4.5	5.4		22	28	28	2.8	2.6	2.2	
December	934.8	936.1	935.0	934.5	2.8	5.2	3.6		20	22	23	2.7	2.4	2.5	
Year	929.0	930.0	929.2	928.1	1.2	7.6	9.0		18	21	20	2.0	2.1	2.0	

IRANIAN OIL
OPERATING COMPANIES

CLIMATOLOGICAL GRAPH

YEARLY SUMMARY

Year: 1963

Station: Gachs Saran

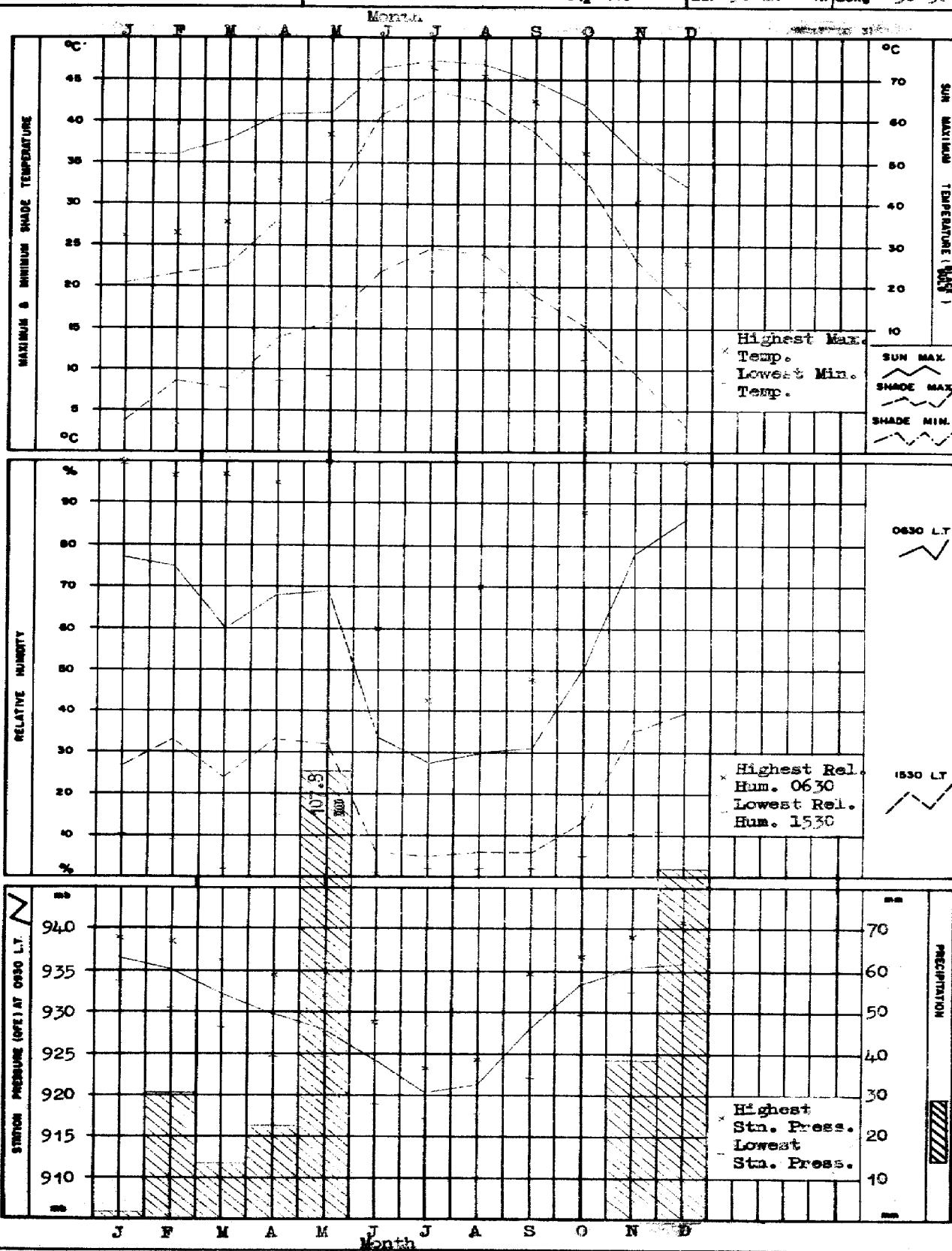
Ground Level: 709 m.

A.M.S.L.

Local Time:

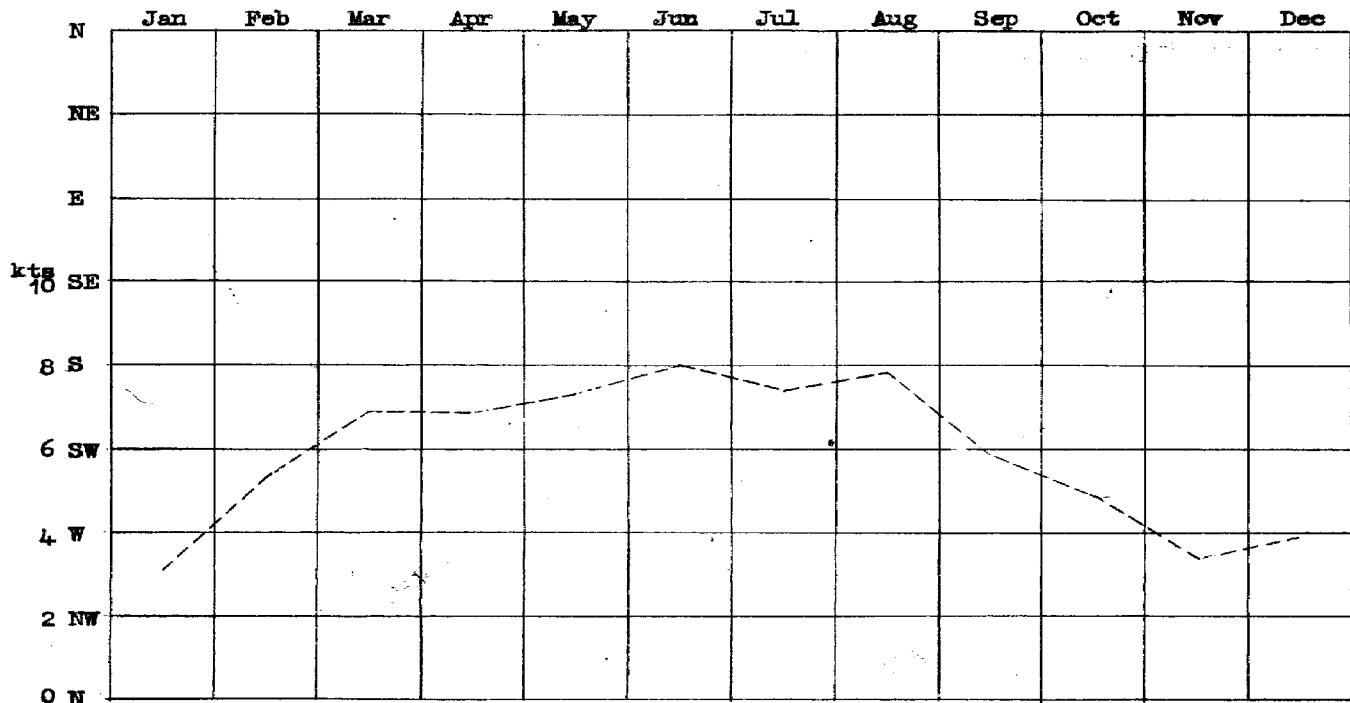
G.M.T. + 3½ hrs

Lat: 30°20' N. Long: 50°50' E



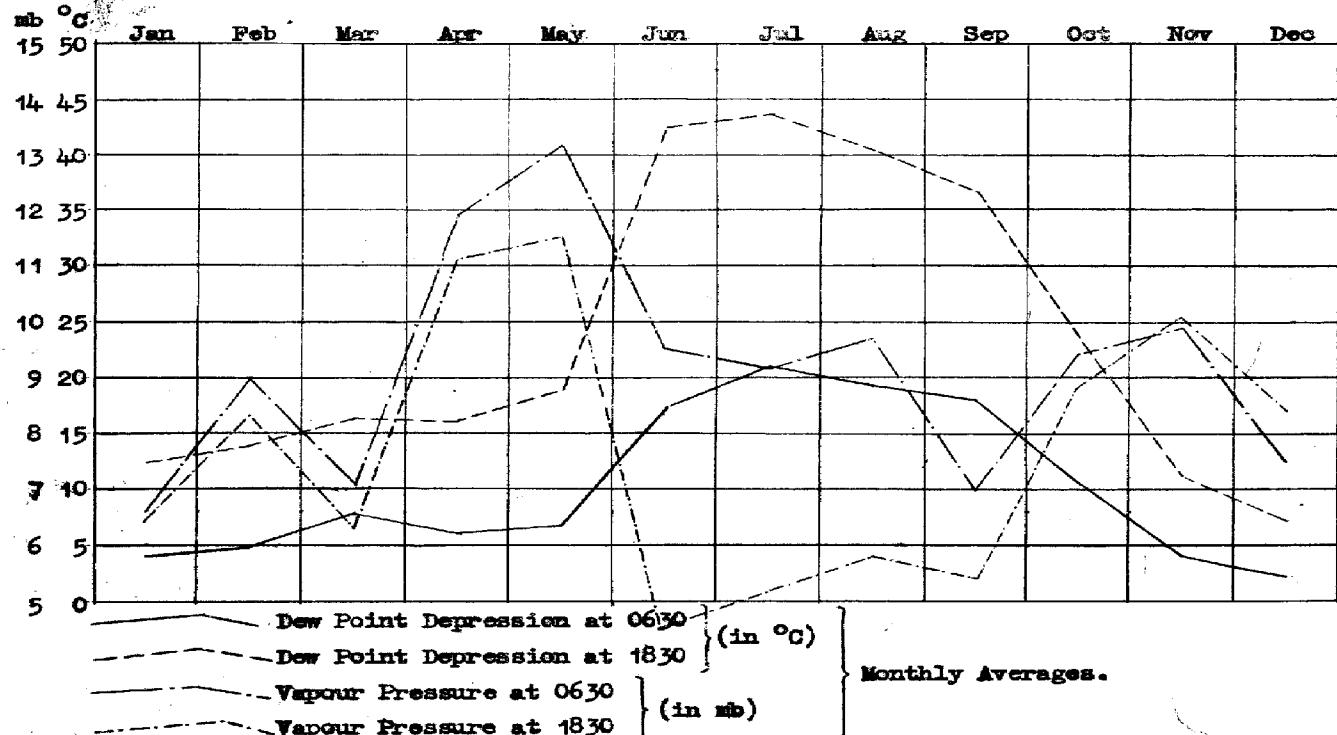
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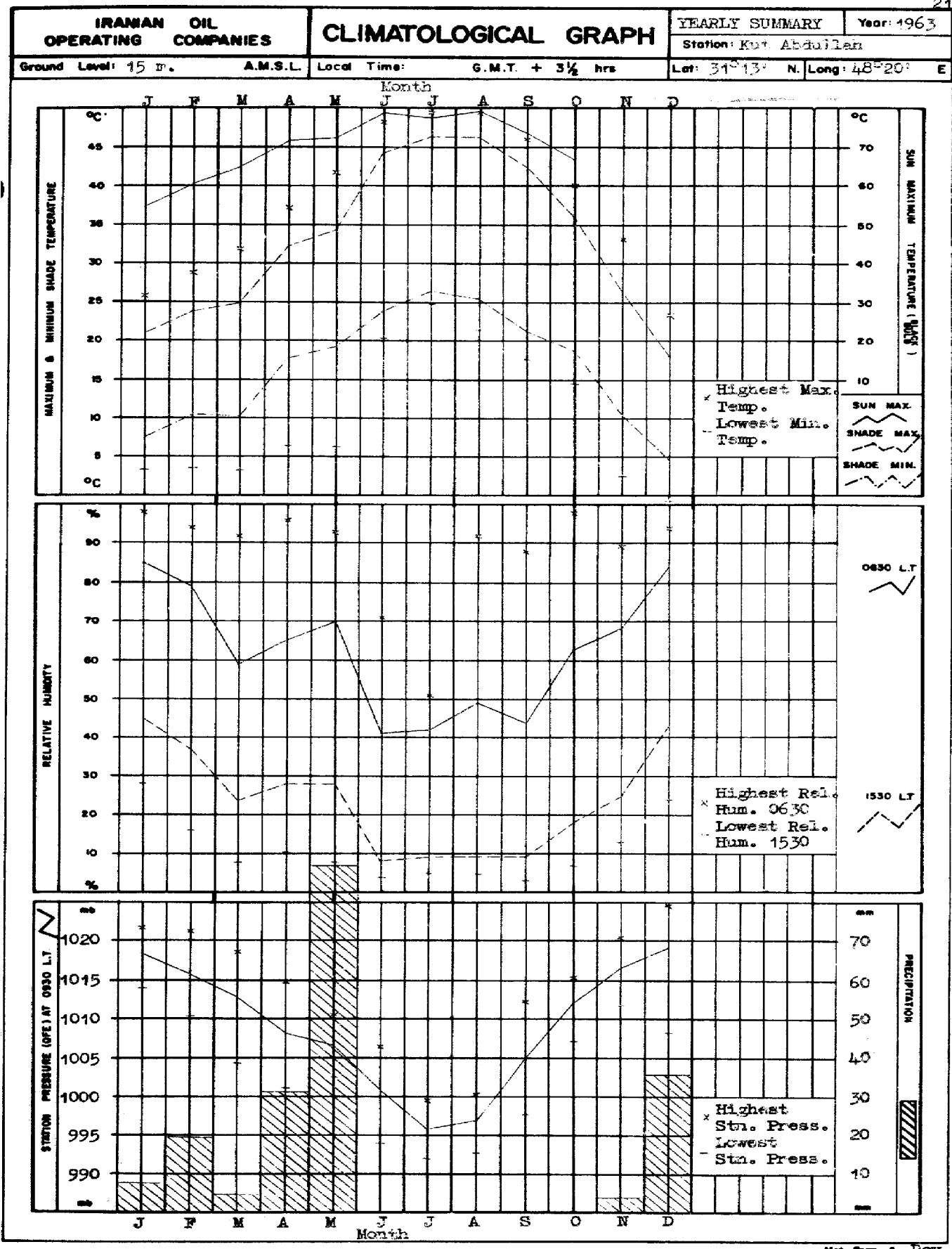
IRANIAN OIL OPERATING COMPANIES	YEARLY WEATHER SUMMARY	Year: 1963 Station: Gach Saran
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* Prevailing Wind Direction for each month (in % of monthly total number of cases)*
--- Monthly average of wind speed (average of 0630, 1230, and 1830 observations).

* No recordings from Gach Saran.





IRANIAN OIL OPERATING COMPANIES	YEARLY WEATHER SUMMARY	Year: 1963 Station: Abadan
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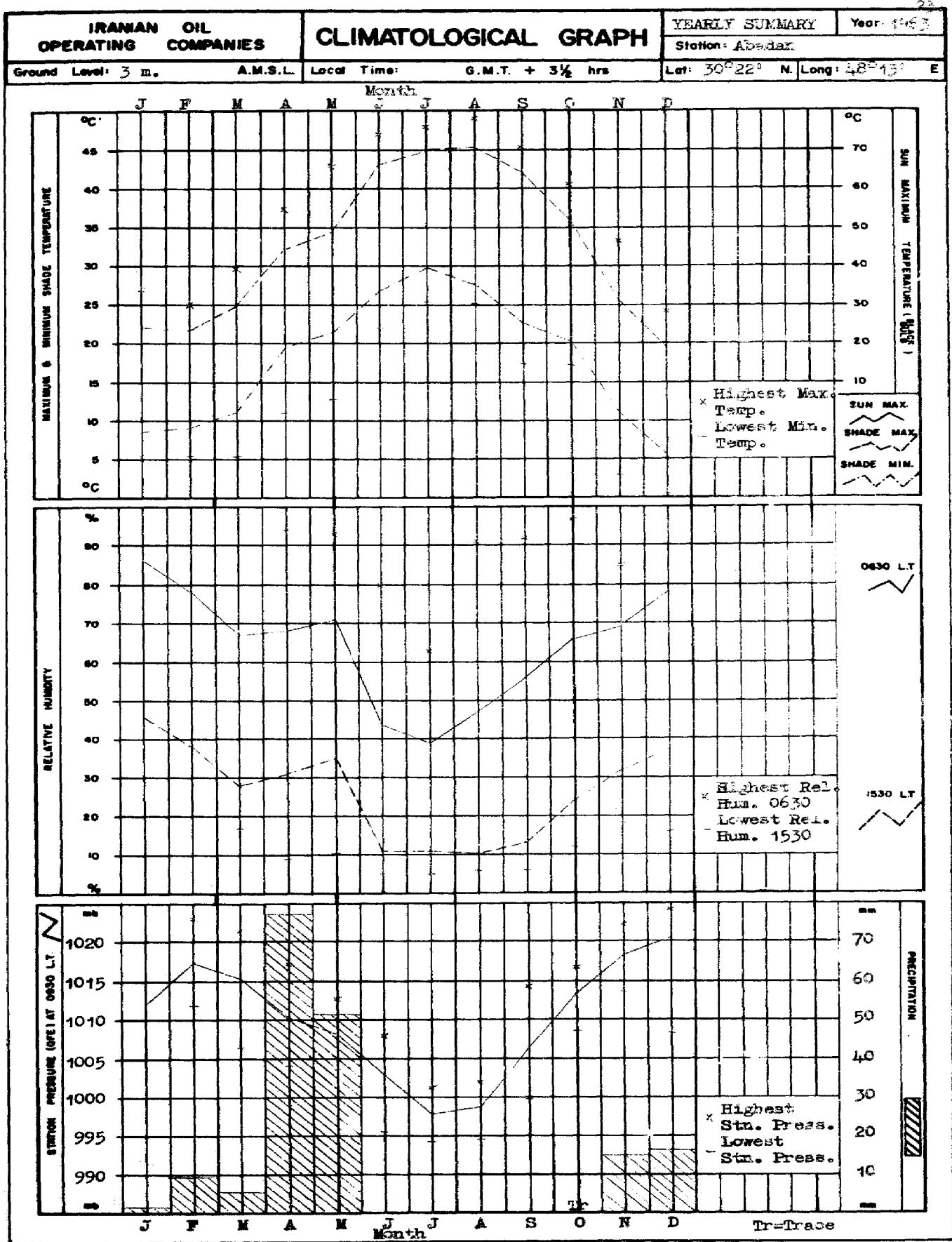
	Temperature °C												Dew Point Degr. °C				
	Average	Average	Average	Average	Highest	Average	Lowest	Average	Lowest	Average	Highest	Average	Average	Average	Average	Average	
	0630	1230	1830	Max.	Max.	Min.	Min.	Min.	Min.	Max.	Max.	Gr. 1/2 (Max+Min)	0630	0930	1230	1830	
January					22.1*	27.0*	8.7*	5.4*				15.9*					
February					21.7	25.0	9.1	5.4				15.4					
March					25.0	29.7	11.1	5.4				18.1					
April	20.5	29.9	28.6	32.1	37.4	19.4	11.1	17.2	10.2			25.7	6.8	12.0	19.2	17.5	
May	25.6	31.2	31.1	34.4	42.9	21.4	12.8					27.9	9.1	12.9	18.7	18.2	
June	27.7	40.7	39.3	43.1	47.0	26.7	22.0					34.9	14.1	25.5	36.3	33.0	
July	29.9	42.5	41.1	45.0	47.9	29.7	25.4					37.4	16.5	28.8	35.3	32.6	
August	28.8	42.8	40.8	45.3	49.0	27.7	25.0					36.5	13.5	23.8	35.1	31.6	
September	23.9	39.5	36.4	42.2	45.4	22.8	17.4					32.5	10.1	20.0	32.5	24.3	
October	21.2	34.0	30.3	36.2	40.6	20.2	17.2					28.2	7.2	13.1	22.5	16.4	
November	12.3	24.0	20.5	25.9	33.5	11.3	3.0		1.0			18.6	6.2	9.9	16.9	12.5	
December	7.5	16.9	14.3	19.5	24.4	5.7	0.4	4.8	-1.3			12.6	3.7	6.9	12.7	9.1	
Year	19.4*	30.4*	23.6*	32.8	49.0	17.8	0.4	-1.3				25.3	8.5*	14.5*	22.5*	19.1*	
	Vapour Pressure mb				Relative Humidity %								Precipitation mm				
	Average	Average	Average	Average	0630	0630	1230	1530	1530	1830	Daily Aver.	Monthly Total	% of normal	24 hr Max.			
	0630	0930	1230	1830													
January	12.6*				86*							68*	1.6*	1*	1.6*		
February					78*							56*	9.6*	3*	4.2*		
March	10.7				67	98						45	5.7	34	4.3		
April	16.0	16.1	13.9	14.1	68	94	35	31	9	40	47	77.2	536	57.9			
May	18.9	18.0	14.5	15.4	71	93	32	35	10	36	47	51.6	862	39.4			
June	16.0	12.9	10.1	9.9	44	80	13	11	5	14	23	0	-	0			
July	15.9	10.8	10.9	11.5	39	63	13	11	5	15	22	0	-	0			
August	18.3	15.8	11.0	12.2	47	91	13	10	6	16	25	0	-	0			
September	16.5	15.4	10.8	15.0	56	92	15	13	6	25	32	0	-	0			
October	16.9	17.6	14.5	16.4	66	97	28	24	12	38	44	Tr.	-	Tr.			
November	10.1	11.1	10.8	11.3	69	85	34	32	18	46	50	15.0	4.9	15.0			
December	8.3	8.8	8.6	9.0	78	97	44	37	16	53	58	16.5	4.5	14.5			
Year	14.2*	13.6*	11.6*	12.7*	64	30*	26	5	40*	43		177.2	98	57.9			
	Station Pressure mb				Wind Velocity kts				Visibility km			Cloudiness /%					
	Average	Average	Average	Average	0630	1230	1830	Max.	Average	Average	Average	0630	1230	1830	0630	1230	1830
	0630	0930	1230	1830													
January	1010.8*														*	*	*
February	1016.2	1017.4	1016.8	1015.2											3*	3*	3*
March	1014.8	1015.4	1014.8	1013.0											3*	3*	4*
April	1008.9	1010.3	1009.2	1010.6	4.5	7.5	9.4		13	13	13	4.8	3.7	4.8			
May	1007.6	1008.3	1007.5	1005.8					16	15	14	0.0	0.0	0.3			
June	1002.3	1003.0	1002.7	1001.2	4.6	13.5	10.5		14	15	14	0.5	0.9	0.7			
July	997.1	997.9	997.6	996.0	5.3	12.0	10.0		15	17	17	0.2	0.6	1.0			
August	997.9	998.8	998.4	996.9	2.8	7.8	6.4		15	18	19	0.2	0.0	0.1			
September	1005.3	1006.6	1005.9	1004.3	1.5	5.1	2.1		15	17	17	2.3	2.0	1.9			
October	1012.1	1013.5	1012.5	1011.1	1.9	6.1	2.7		15	17	17	2.0	2.3	2.2			
November	1016.5	1018.3	1016.6	1016.2	0.9	7.3	3.0		23	28	25	2.0	2.3	2.2			
December	1019.1	1020.6	1010.4	1018.7	2.2	8.1	4.1		15	18	18	1.6	2.2	2.0			
Year	1010.7*	1010.8	1010.1*	1009.8*	3.0*	9.6*	6.0*		15*	16*	17*	1.5*	1.7*	1.9*			

* Data from Meteorological Office, Abadan Civil Airport.

* Averages obtained by climatological comparison with Kut Abdullah.

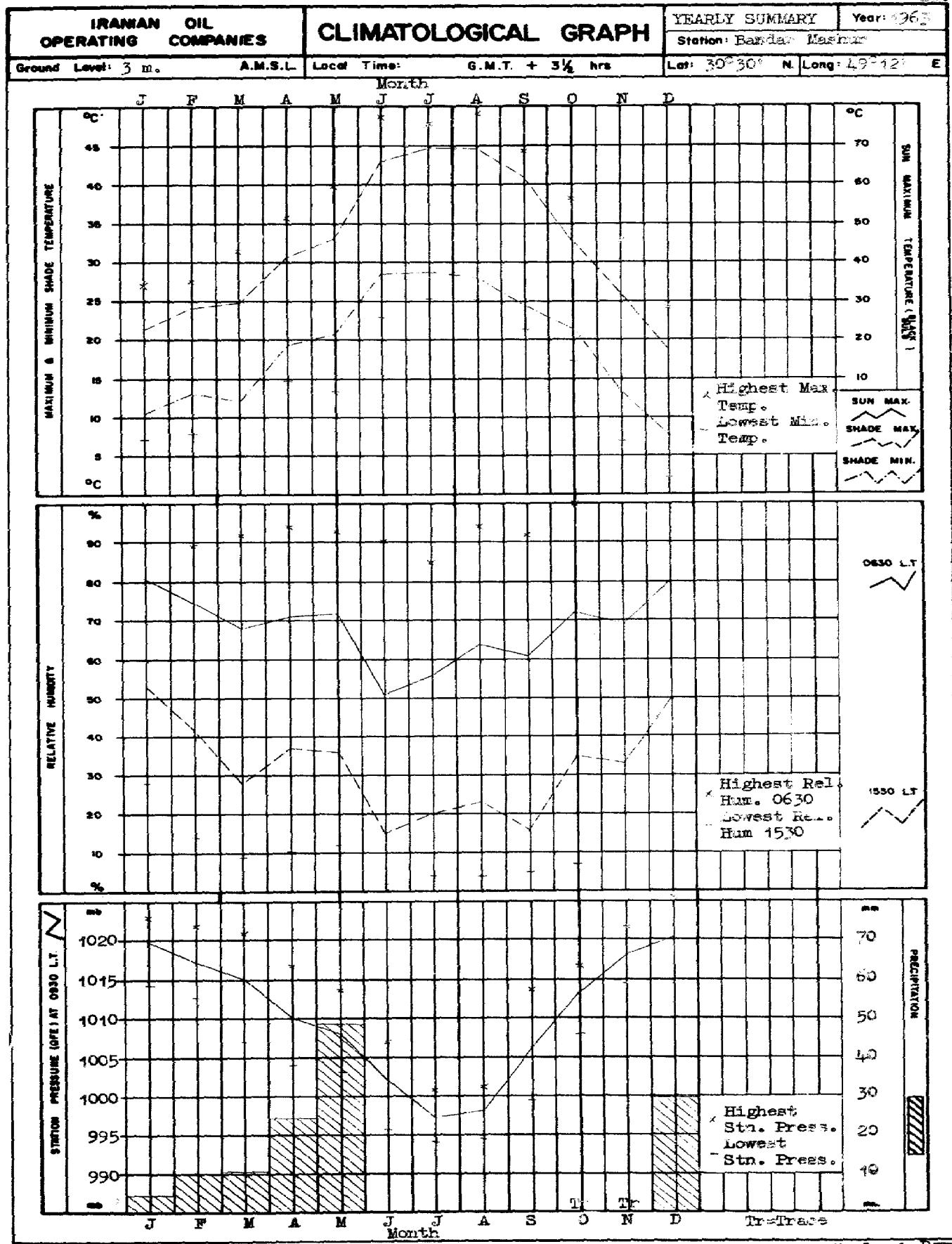
& " " " " " 0930 observ.

Met. Form 7

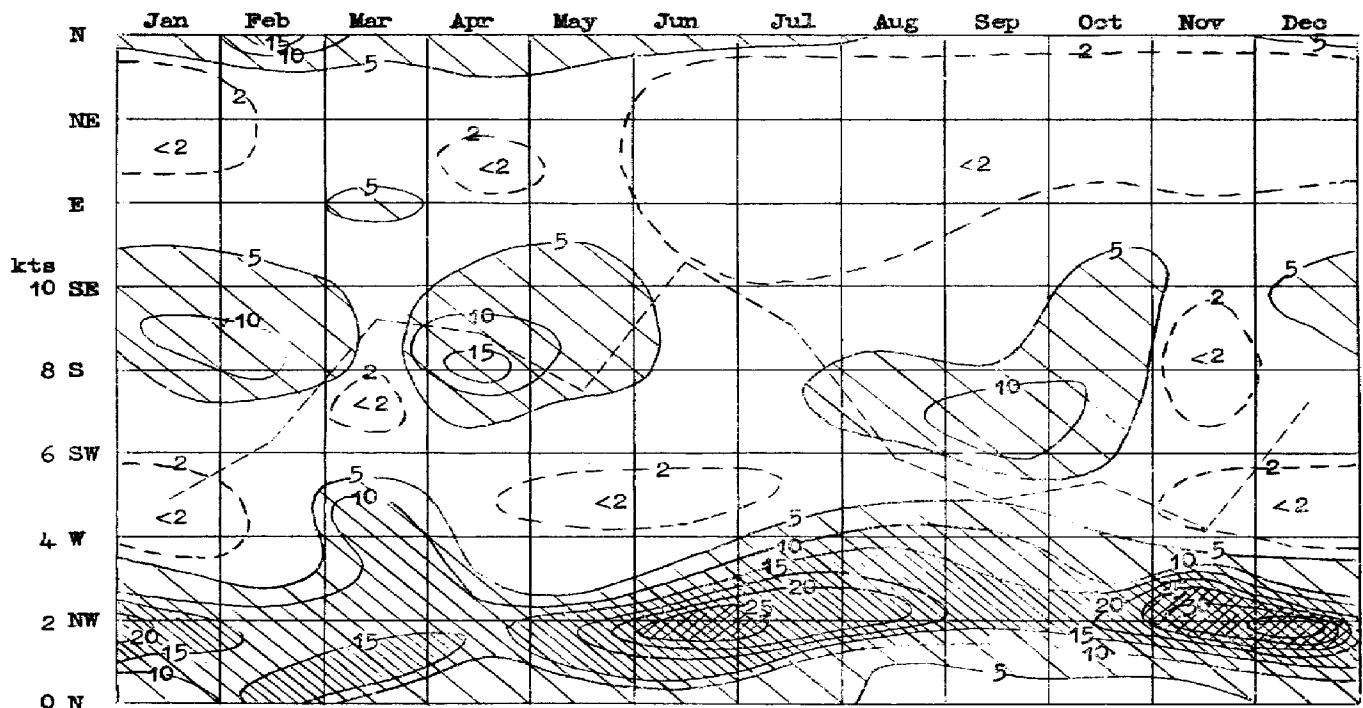


IRANIAN OIL OPERATING COMPANIES	YEARLY WEATHER SUMMARY	Year: 1963 Station: Bandar Mashur
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	Temperature °C												Dew Point Depr. °C					
	Average	Average	Average	Average	Highest	Average	Lowest	Average	Gr.	Gr.	Sun.	Sun.	Month.	Av.	Average	Average	Average	Average
	0630	1230	1830	Max.	Max.	Min.	Min.	Min.	Min.	Max.	Max.	Max.	Max.	$\frac{1}{2}(\text{Max+Min})$	0630	0930	1230	1830
January	11.5	18.7	18.2	21.3	27.0	10.4	7.2	9.4	6.4					15.9	3.3	4.4	7.8	6.9
February	14.1	22.0	19.8	24.0	27.5	13.2	8.0	12.4	6.8					18.6	4.5	6.2	12.1	8.2
March	13.0	22.2	20.9	24.9	31.2	12.1	5.0	11.1	3.2					18.5	5.9	9.4	16.9	15.1
April	20.2	27.7	26.6	30.6	35.7	19.3	14.8	18.8	14.5					25.0	6.1	10.7	14.4	13.1
May	22.1	30.7	29.3	32.9	39.6	20.8	13.5	20.5	13.0					26.9	5.7	10.8	15.8	14.7
June	26.7	40.7	38.1	42.9	48.8	28.6	22.9	24.9	22.0	75.4	79.7			35.8	11.8	21.6	31.6	25.7
July	29.2	42.0	39.9	44.8	47.6	28.7	25.3	26.6	23.5	78.7	79.5			36.8	10.4	18.2	26.5	24.3
August	28.7	41.1	39.1	44.5	48.9	28.1	25.1	25.5	21.5					36.3	7.8	14.9	23.4	19.2
September	25.5	38.1	35.1	41.0	44.4	24.6	21.4	21.7	18.7					32.8	8.8	13.8	25.9	17.5
October	22.1	32.7	30.3	33.0	38.2	21.5	17.3	19.7	15.8					28.3	5.6	10.2	15.3	12.5
November	14.3	23.6	21.3	26.0	32.9	13.5	6.9	13.0	6.5					19.8	5.6	7.8	15.2	10.4
December	8.8	16.1	14.9	18.7	24.3	7.7	2.2	7.0	2.0					13.2	3.4	4.4	8.3	7.5
Year	19.7	29.6	27.8	32.2	48.9	19.1	2.2	17.6	2.0					25.6	6.6	11.0	17.8	14.6
	Vapour Pressure mb				Relative Humidity %								Precipitation mm					
	Average	Average	Average	Average	Average	Highest	Average	Average	Lowest	Average	Daily Aver.		Monthly Total	% of normal	24 hr. Max.			
	0630	0930	1230	1830	0630	0630	1230	1530	1530	1830								
January	11.1	11.7	13.2	13.5	82	100	62	53	26	58	70		4.7	8	2.6			
February	12.2	13.1	12.4	14.1	75	89	47	42	14	59	60		10.0	44	6.7			
March	10.5	11.1	9.6	9.8	68	92	36	28	9	50	58		10.7	41	8.2			
April	16.7	17.0	13.7	16.3	71	94	37	37	10	48	53		24.4	208	11.6			
May	18.9	18.2	17.2	17.3	71	93	41	36	12	45	51		42.2	479	33.2			
June	17.7	16.3	12.8	15.5	51	90	18	15	2	25	31		0	0	0			
July	22.8	21.2	19.1	18.9	56	85	23	20	4	27	35		0	0	0			
August	25.7	24.9	21.5	24.8	64	94	29	23	4	37	43		0	0	0			
September	20.0	21.2	15.2	21.3	61	92	23	16	5	38	41		0	0	0			
October	19.9	21.4	21.3	21.7	72	100	43	35	7	52	56		0	0	0			
November	11.9	13.2	11.6	13.8	69	88	40	33	15	51	55		Tr.	Tr.	Tr.			
December	9.3	10.2	10.9	10.8	80	94	59	50	31	62	66		29.7	76	24.3			
Year	16.4	16.7	14.9	16.5	68	100	38	32	2	45	51		127.9	70	33.2			
	Station Pressure mb				Wind Velocity kts				Visibility km			Cloudiness /8						
	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	
	0630	0930	1230	1830	0630	1230	1830	Max.	0630	1230	1830	0630	1230	1830	0630	1230	1830	
January	1018.3	1019.8	1018.3	1017.4	4.4	5.4	4.8	14	22	22	25	2.2	4.1	3.0				
February	1016.3	1017.2	1016.4	1015.0	5.4	8.0	5.4	21	30	29	30	3.8	4.1	4.8				
March	1013.7	1015.1	1014.3	1012.5	6.0	11.9	9.8	28	27	22	20	2.3	3.5	2.4				
April	1008.8	1010.0	1009.3	1007.9	5.7	10.4	10.5	30	21	23	22	4.5	4.2	4.7				
May	1007.2	1008.1	1007.8	1005.6	5.6	9.0	8.0	27	19	23	20	2.4	2.6	2.9				
June	1001.5	1002.2	1001.8	1000.1	6.5	12.3	13.0	28	20	21	19	0.0	0.0	0.0				
July	996.7	997.4	996.9	995.0	4.3	9.4	13.5	22	20	21	20	0.9	0.5	0.4				
August	997.3	998.3	997.9	995.9	2.7	6.7	8.3	17	18	26	22	0.6	0.0	0.3				
September	1004.9	1006.2	1005.6	1004.0	3.0	5.4	6.4	14	16	20	18	0.0	0.0	0.1				
October	1012.0	1013.3	1012.3	1011.0	4.0	6.6	5.4	14	19	19	24	2.4	2.3	1.9				
November	1016.7	1018.1	1016.9	1015.7	2.9	5.8	3.8	15	31	28	28	2.0	2.5	2.4				
December	1018.8	1020.2	1019.1	1018.3	6.8	8.8	6.1	17	16	19	21	1.5	2.4	2.0				
Year	1009.3	1010.5	1009.7	1008.2	4.8	8.3	7.9	21	22	23	22	2.0	2.2	2.1				

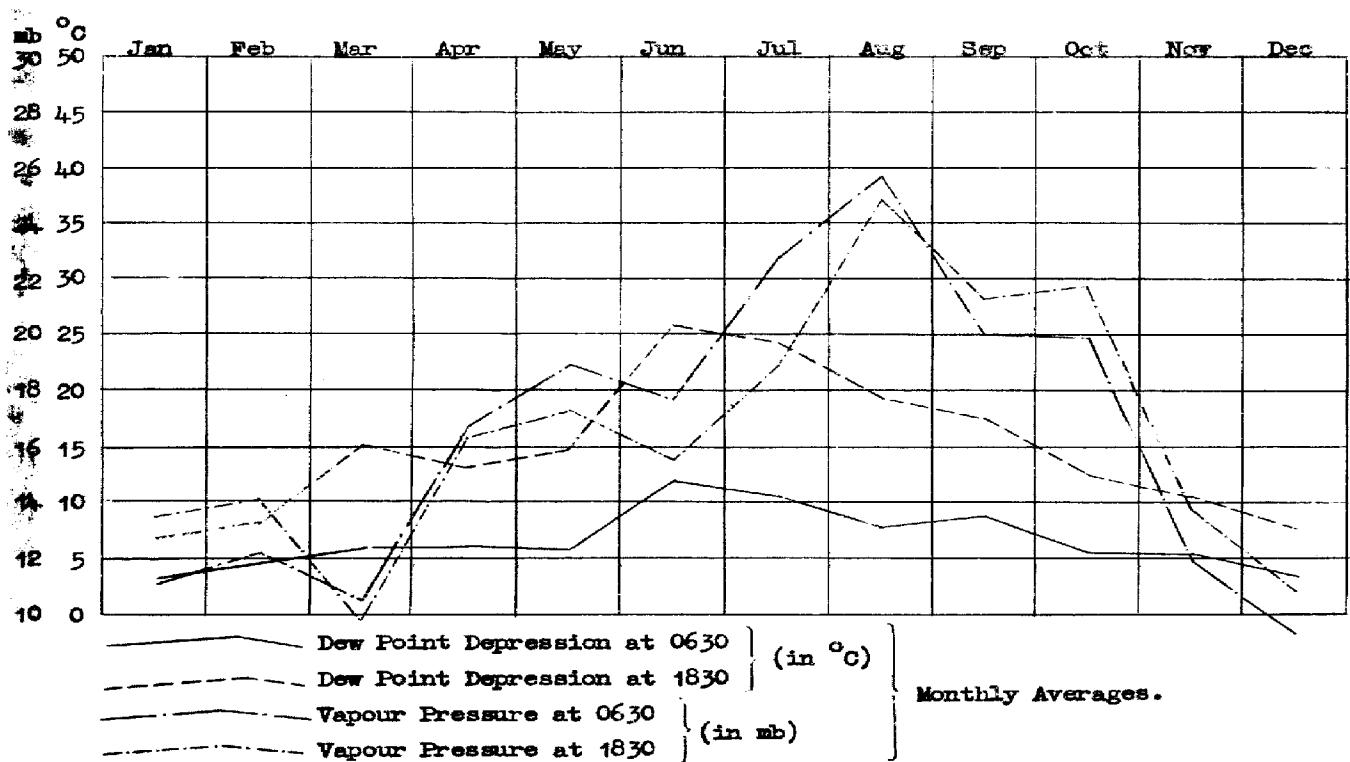


IRANIAN OIL OPERATING COMPANIES	YEARLY WEATHER SUMMARY	Year: 1963 Station: Bandar Mashur
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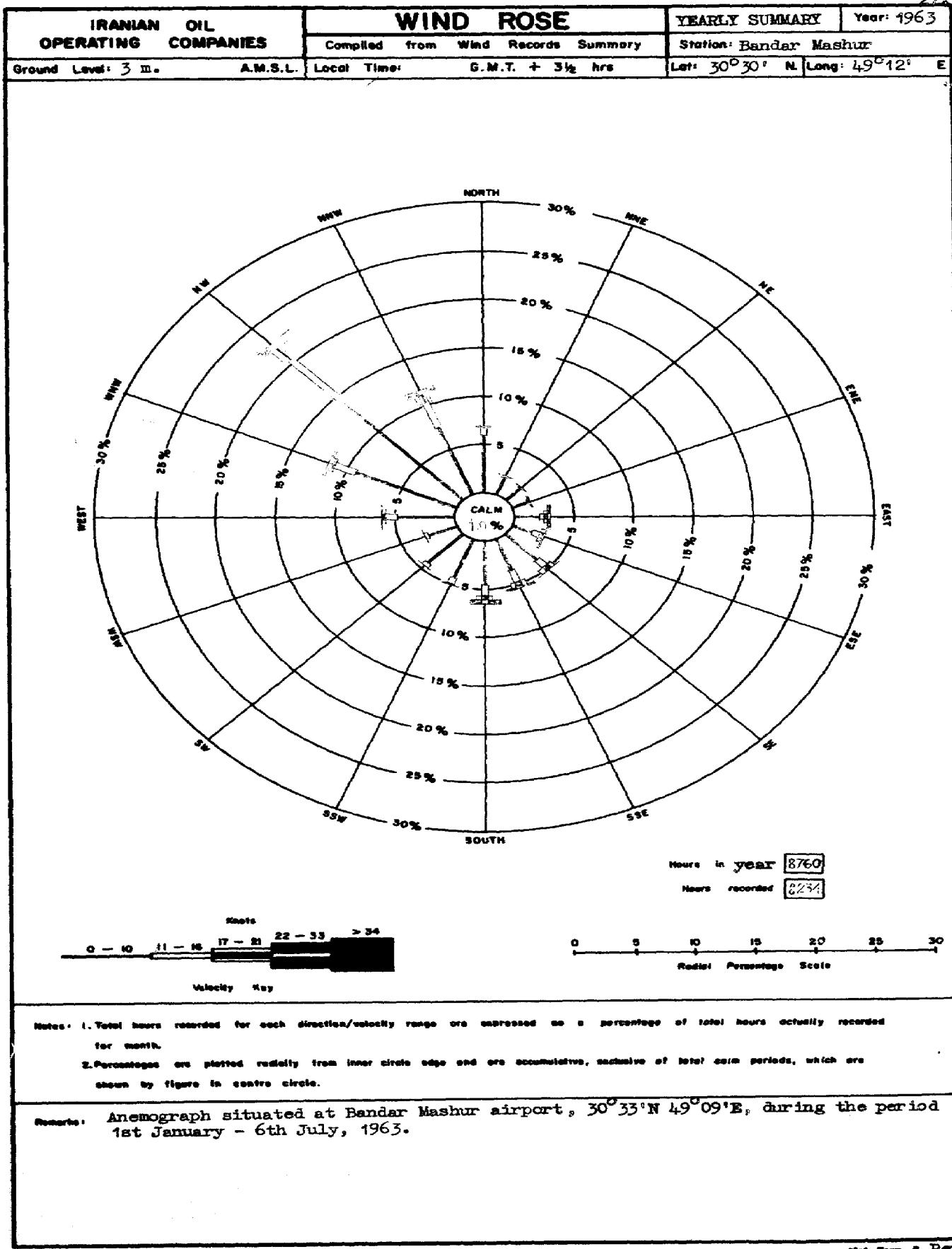


Prevailing Wind Direction for each month (in % of monthly total number of cases).

— Monthly average of wind speed (average of 0630, 1230, and 1830 observations)



Monthly Averages.



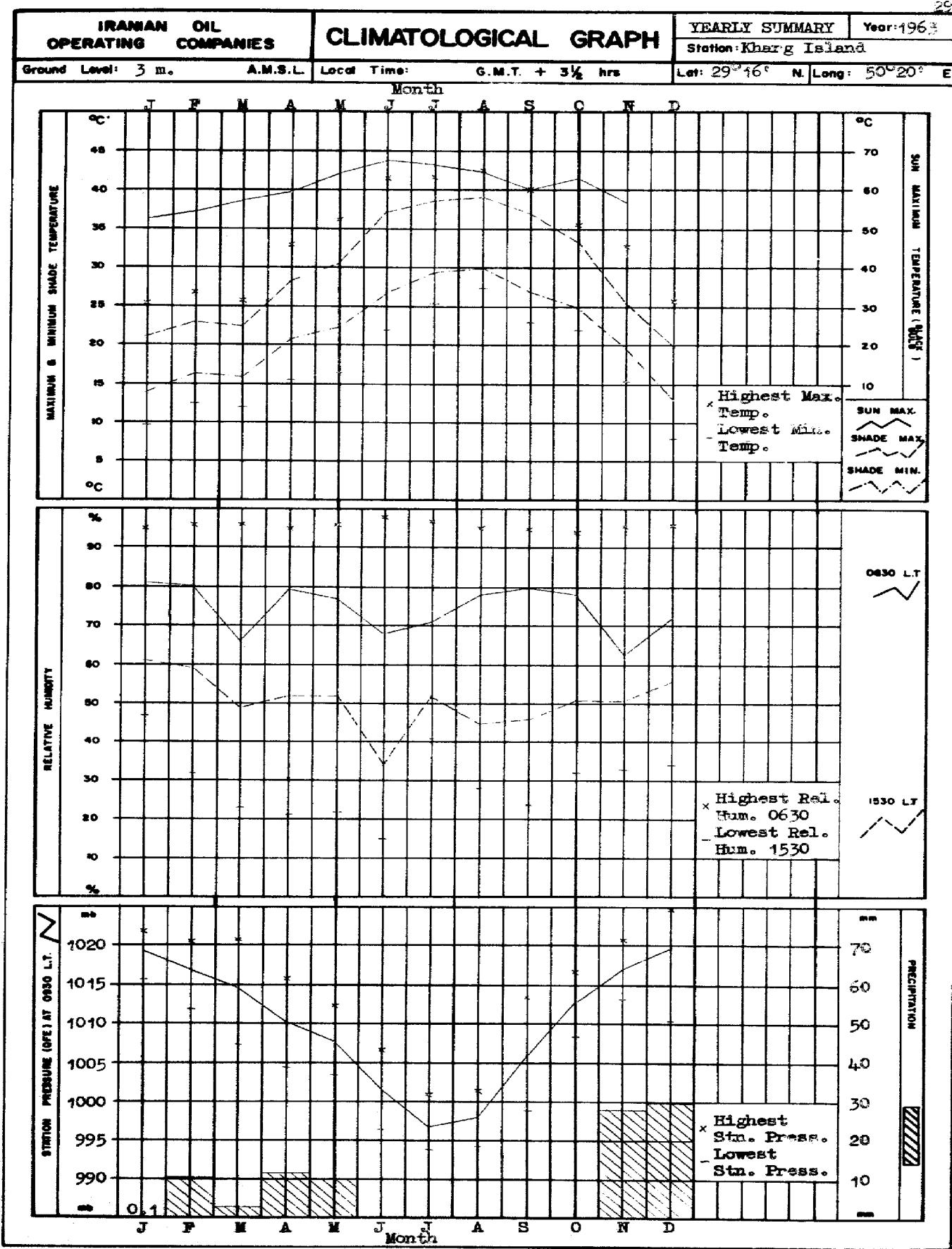
IRANIAN OIL OPERATING COMPANIES	YEARLY WEATHER SUMMARY	Year: 1963 Station: Kharg Island
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	Temperature °C												Dew Point Depr. °C			
	Average	Average	Average	Average	Highest	Average	Lowest	Average	Lowest	Average	Highest	Month. Av.	Average	Average	Average	Average
	0630	1230	1830	Max.	Max.	Min.	Min.	Min.	Min.	Min.	Max.	Max.	0630	0930	1230	1830
January	14.9	19.8	18.7	21.1	25.2	13.9	9.5	11.1	5.7	52.6	60.0	17.5	3.5	5.6	7.3	7.0
February	17.2	21.6	20.1	23.0	26.8	16.3	12.5	13.0	8.2	54.6	60.8	19.7	3.7	6.2	8.2	6.5
March	17.0	21.2	19.9	22.5	25.8	16.0	12.0	13.6	8.0	57.3	64.0	19.3	6.9	8.8	10.8	9.3
April	21.2	26.5	24.4	28.2	33.0	20.8	15.6	17.6	12.4	59.7	67.0	24.5	4.2	7.8	10.8	8.3
May	23.7	28.5	27.3	30.5	36.2	22.2	16.5	20.1	13.5	64.0	70.2	26.4	4.3	7.7	9.6	9.2
June	28.2	34.6	34.1	37.3	41.6	26.8	22.0	24.1	19.4	67.4	71.4	32.1	6.7	12.9	16.4	15.9
July	30.8	36.1	35.5	38.6	41.6	29.4	25.4	27.2	24.0	66.5	72.0	34.0	6.4	10.4	14.5	13.1
August	30.8	37.2	35.8	39.1	42.5	30.0	27.5	28.0	25.4	64.7	72.0	34.6	4.6	9.5	12.7	11.9
September	27.8	35.6	33.0	37.1	40.0	27.0	23.0	24.8	20.0	59.9	65.0	32.1	4.1	8.9	13.5	9.6
October	25.9	32.6	29.7	33.5	35.6	24.9	22.0	22.6	19.6	63.2	67.6	30.2	4.5	9.0	12.2	8.8
November	20.2	24.7	22.5	25.6	33.0	19.6	15.4	17.2	11.8	56.9	67.0	22.5	7.7	10.0	11.6	10.0
December	14.6	18.2	16.4	19.9	26.0	13.1	8.0	10.4	3.6			16.5	5.4	7.2	8.7	7.1
Year	22.8	28.1	26.5	29.7	42.5	21.7	8.0	19.2	3.6	59.4	72.0	25.6	5.7	8.7	11.4	9.7

	Vapour Pressure mb				Relative Humidity %								Precipitation mm			
	Average	Average	Average	Average	Average	Highest	Average	Average	Lowest	Average	Daily Aver.	Monthly Total	% of normal	24 hr. Max.		
	0630	0930	1230	1830	0630	0630	1230	1530	1530	1830	Aver.					
January	13.7	14.9	14.7	14.0	81	95	63	61	47	67	70	0.1	0.1	0.1		
February	15.7	16.1	15.7	16.1	80	96	61	59	32	41	69	10.2	40	6.6		
March	12.9	13.4	13.2	13.4	66	96	52	49	23	57	58	2.8	15	1.3		
April	19.6	19.4	18.1	18.6	79	95	53	52	21	68	65	11.5	96	5.6		
May	22.8	22.7	22.1	21.2	77	96	58	52	22	63	64	10.0	333	5.8		
June	26.0	23.0	21.3	21.3	68	98	40	34	15	41	50	0	-	0		
July	30.7	30.6	26.5	27.4	71	97	45	52	41	48	55	0	-	0		
August	34.6	33.8	31.2	30.1	78	95	50	45	28	52	60	0	-	0		
September	29.6	31.1	27.3	29.2	80	95	47	46	24	58	62	0	-	0		
October	25.8	26.9	24.5	25.4	78	94	51	51	32	60	63	0	-	0		
November	15.8	15.9	15.6	15.2	63	96	50	51	33	55	56	28.2	98	16.6		
December	12.1	12.7	12.3	12.1	72	96	58	56	34	64	64	29.9	144	13.5		
Year	21.6	21.7	20.2	20.4	75	98	52	51	15	56	61	92.7	60	16.6		

	Station Pressure mb				Wind Velocity kts				Visibility km			Cloudiness /8		
	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average
	0630	0930	1230	1830	0630	1230	1830	Max.	0630	1230	1830	0630	1230	1830
January	1017.9	1019.4	1018.2	1017.6	5.2	6.5	4.5	18	20	21	19	1.8	2.1	1.9
February	1015.7	1017.0	1016.3	1014.8	4.5	7.8	5.6	22	21	23	20	3.7	3.9	4.1
March	1013.3	1014.8	1014.2	1012.5	10.4	10.3	9.0	26	17	19	18	3.0	2.7	2.7
April	1009.0	1010.1	1009.9	1007.9	3.6	7.1	5.8	22	20	20	22	3.7	3.4	3.8
May	1006.7	1007.8	1007.5	1005.7	5.5	10.2	8.3	22	20	19	20	2.1	2.0	1.5
June	1000.9	1001.7	1001.7	999.7	6.4	12.0	12.4	20	14	16	16	0.0	0.0	0.0
July	996.3	996.9	996.3	995.0	6.0	10.9	9.9	16	12	16	14	1.5	0.5	0.4
August	997.1	998.1	998.0	996.2	3.0	7.3	7.5	12	16	18	19	0.3	0.0	0.0
September	1004.6	1006.0	1005.7	1004.1	1.8	7.2	5.9	11	22	23	22	0.0	0.0	0.0
October	1011.4	1012.8	1012.1	1010.8	2.5	7.0	4.0	14	18	19	18	1.4	1.4	1.4
November	1018.7	1017.1	1016.1	1015.4	6.6	8.7	6.6	16	26	28	25	2.3	3.0	2.3
December	1018.2	1019.6	1018.6	1018.1	8.8	10.3	7.9	22	20	22	22	2.3	1.7	1.3
Year	1009.2	1010.1	1009.6	1008.2	5.4	8.8	7.3	18	19	20	20	1.8	1.7	1.6

* Average obtained by climatological comparison with Agha Jari.

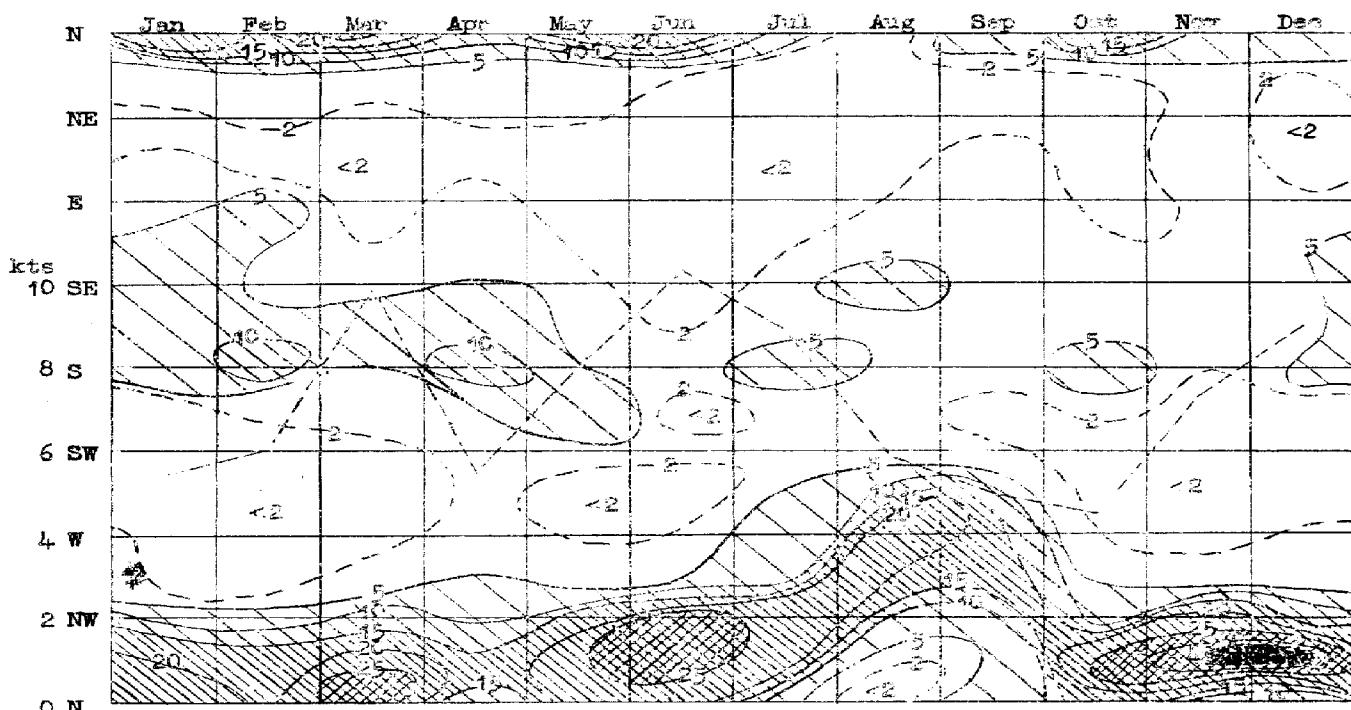


IRANIAN OIL
OPERATING COMPANIES

YEARLY
WEATHER SUMMARY

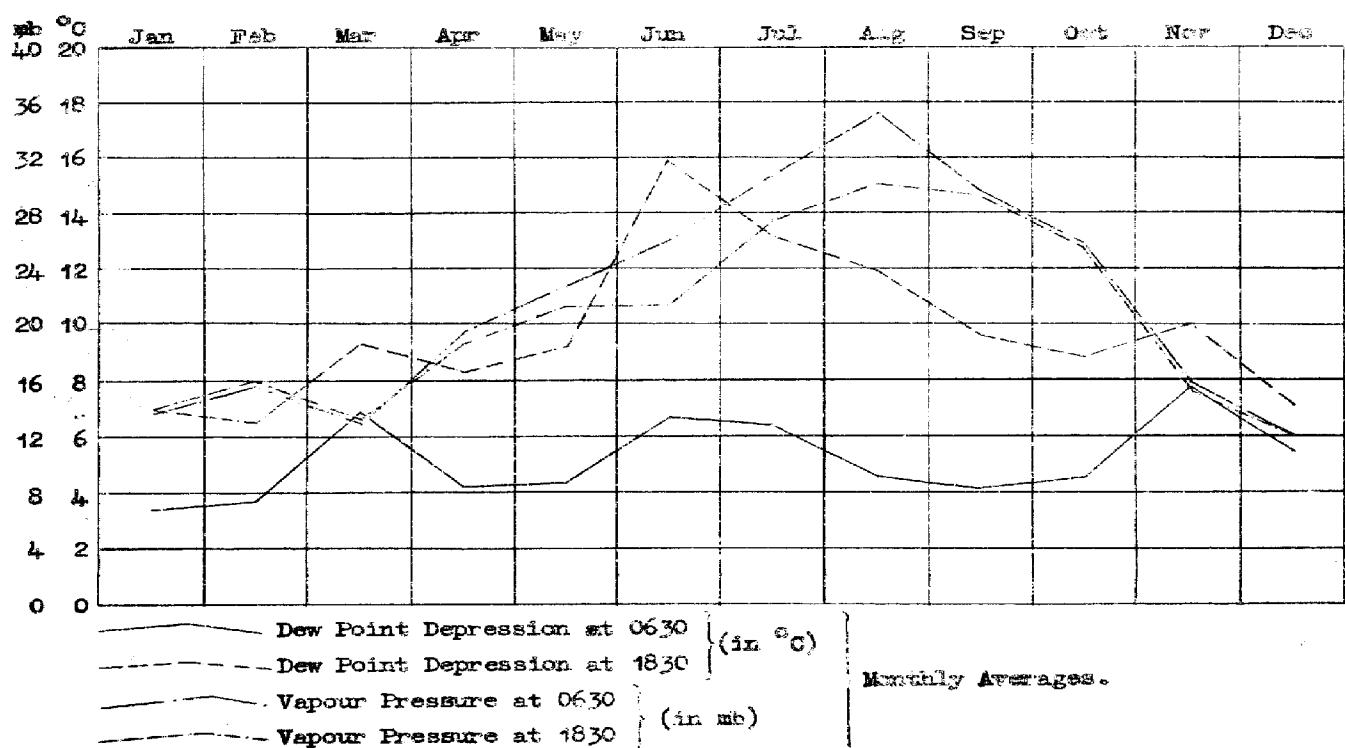
Year: 1963
Station: Kharg Island

70.

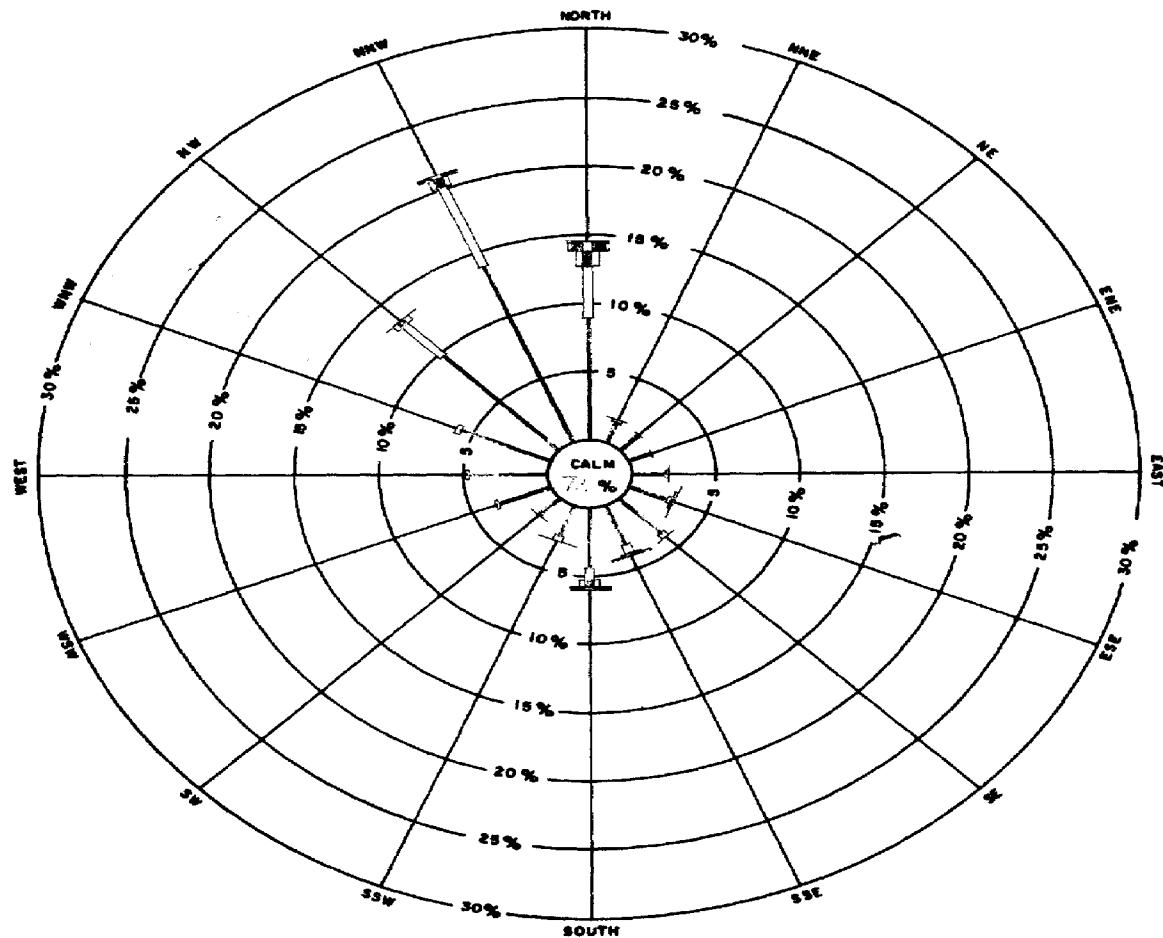
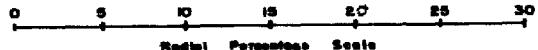
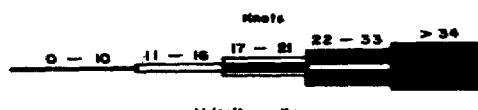


Prevailing Wind Direction for each month (in % of monthly total number of cases).

--- Monthly average of wind speed (average of 0630, 1230, and 1830 observations).



IRANIAN OIL OPERATING COMPANIES	WIND ROSE		YEARLY SUMMARY	Year: 1963
	Compiled from Wind Records Summary		Station: Kharg Island	
Ground Level: 3 m. A.M.S.L.	Local Time: G.M.T. + 3½ hrs		Lat: 29° 16' N. Long: 50° 20' E	

Hours in year 8760Hours recorded 2520

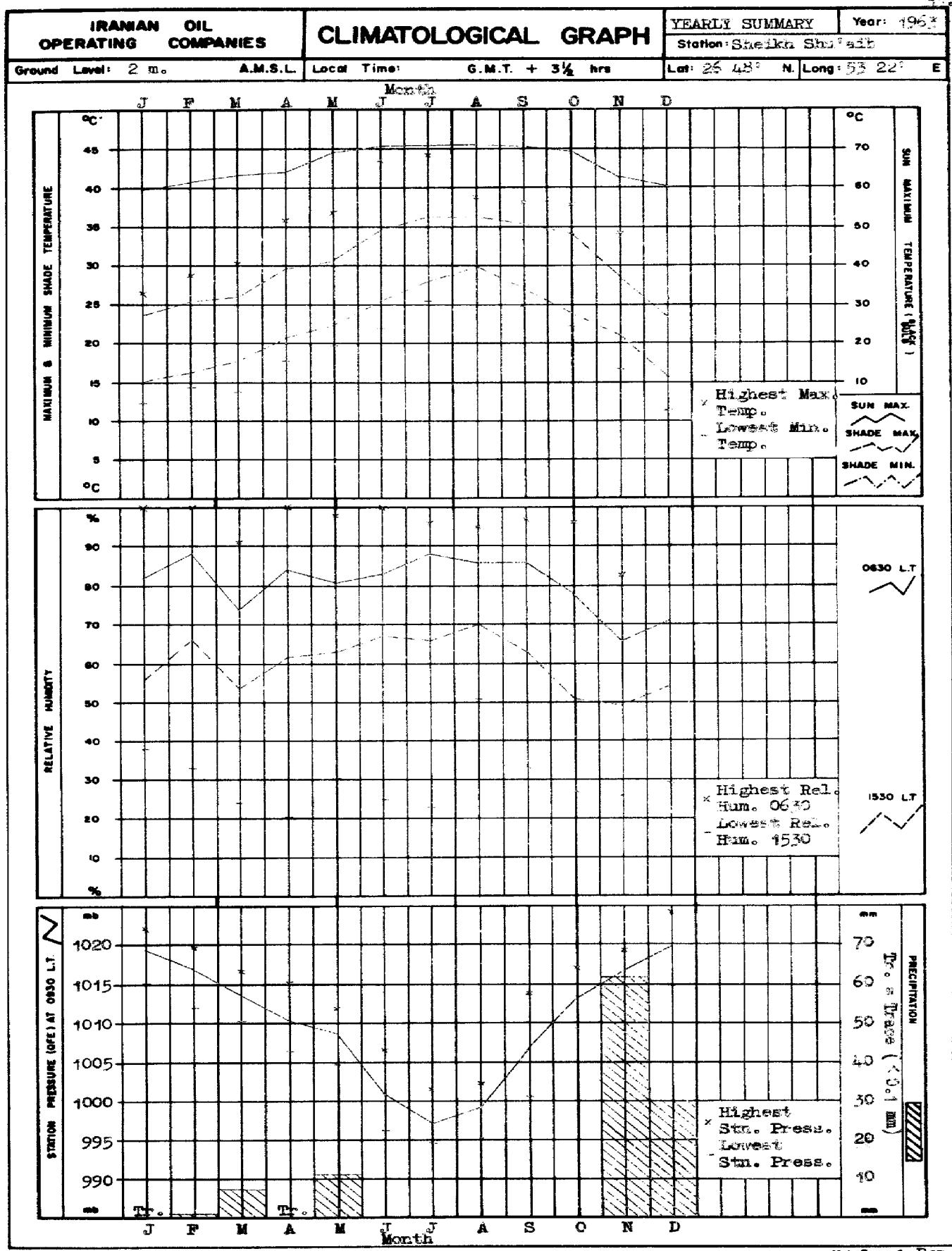
- Notes: 1. Total hours recorded for each direction/velocity range are expressed as a percentage of total hours actually recorded for month.
2. Percentages are plotted radially from inner circle edge and are accumulative, exclusive of total calm periods, which are shown by figure in centre circle.

Remarks:

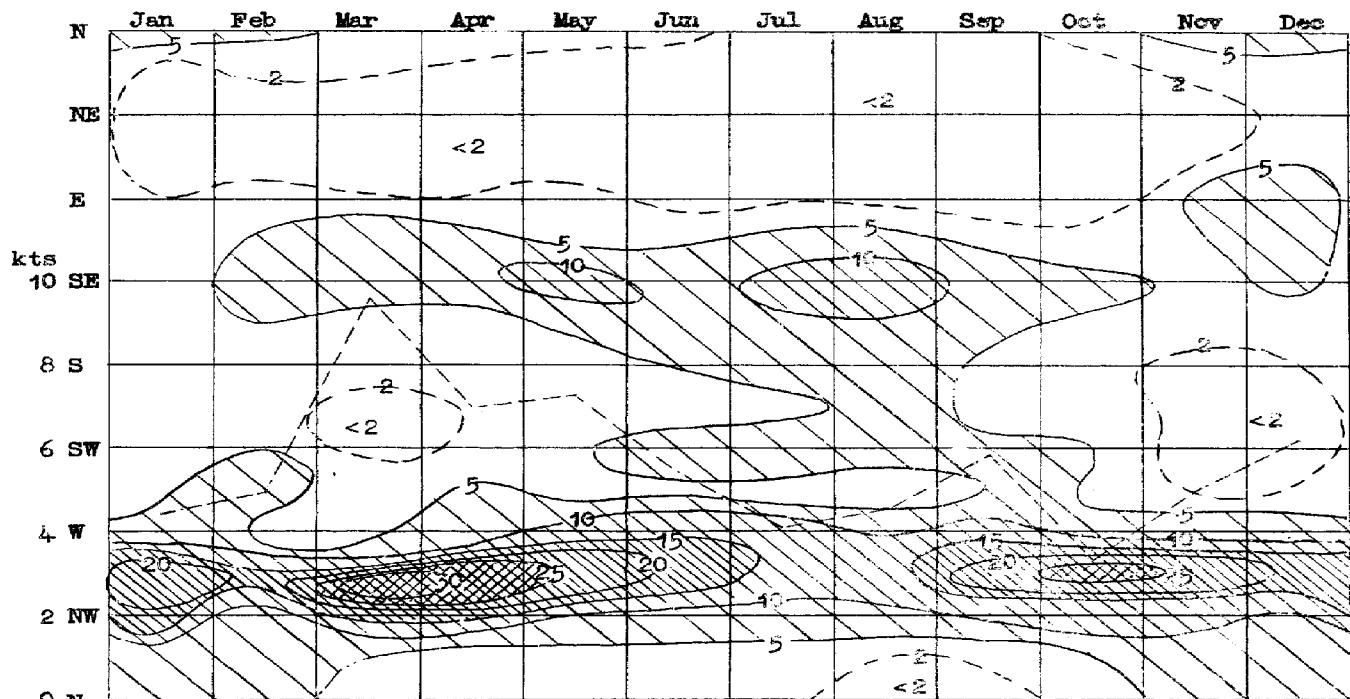
IRANIAN OIL OPERATING COMPANIES	YEARLY WEATHER SUMMARY	Year: 1963 Station: Sheikh Shu'aib
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	Temperature °C												Dew Point Depr. °C					
	Average	Average	Average	Average	Highest	Average	Lowest	Average	Gr. Min.	Gr. Min.	Sun. Min.	Sun. Max.	Month. Max.	$\frac{1}{2}(\text{Max}+\text{Min})$	0630	0930	1230	1830
	0630	1230	1830	Max.	Max.	Min.	Min.	Min.	Min.	Max.	Max.	Max.	Max.	Av.	0630	0930	1230	1830
January	16.2	22.7	19.4	23.6	26.4	15.0	12.4	7.8	5.2	59.3	62.5	19.3	3.0	7.4	9.9	6.3		
February	18.1	25.0	20.9	25.3	28.8	16.3	14.4		61.3	64.5	20.8		2.2	6.5	8.3	4.2		
March	19.3	24.7	21.9	25.9	30.2	17.8	13.9	12.3	7.8	63.1	69.2	21.9	4.9	9.5	11.0	7.3		
April	22.6	29.3	25.4	29.5	35.7	20.7	17.7	18.3	14.3	64.0	71.1	25.1	3.3	8.1	10.2	7.1		
May	25.0	29.6	26.9	30.6	36.8	22.3	19.8	19.0	16.5	68.9	77.4	26.5	3.6	7.9	9.2	6.1		
June	28.2	31.8	31.0	34.6	43.5	25.5	21.9	23.2	20.0	70.5	77.9	30.1	3.3	7.9	6.3	6.4		
July	30.5	34.1	33.7	36.3	44.2	28.1	25.4	25.4	22.2	70.7	76.4	32.2	2.2	5.9	6.4	7.4		
August	31.7	35.2	34.0	36.3	38.8	29.9	28.2	27.5	25.6	70.9	75.0	33.1	2.7	5.1	5.9	6.0		
September	28.9	34.1	32.3	35.3	38.3	27.0	24.9	24.0	20.0	70.3	74.0	31.2	2.9	7.0	7.6	6.9		
October	25.7	33.1	29.6	34.2	38.0	24.0	22.3	20.2	17.0	69.0	72.3	29.1	4.2	11.3	12.9	8.1		
November	22.6	27.7	24.5	28.7	34.2	21.0	16.7	17.3	12.3	62.6	69.7	24.3	6.6	11.0	12.5	8.9		
December	17.3	22.6	19.5	23.5	25.7	15.7	11.4	11.8	7.1	60.0	67.0	19.6	5.5	8.8	10.5	6.5		
Year	23.9	29.2	26.6	30.4	44.2	22.0	11.4	18.2*	5.2	66.0	77.9	26.2	3.7	8.1	9.2	6.8		
	Vapour Pressure mb				Relative Humidity %								Precipitation mm					
	Average	Average	Average	Average	Average	Highest	Average	Average	Lowest	Average	Daily	Monthly	24 hr.	Total	Max.	0930	Sea Temp. °C	
	0630	0930	1230	1830	0630	0630	1230	1530	1530	1630	Aver.							
January	14.7	15.9	15.2	15.4	82	100	54	56	38	67	67	Tr.	Tr.	Tr.	22.1			
February	18.2	18.9	19.3	19.7	88	100	64	66	33	73	75	1.0	1.0	1.0	23.0			
March	16.7	16.3	16.3	17.3	74	91	52	54	24	46	54	7.4	7.7	7.7	22.2			
April	23.1	21.8	22.3	21.3	84	100	63	62	20	66	71	Tr.	Tr.	Tr.	24.7			
May	25.7	24.6	24.4	24.9	82	98	61	63	30	69	71	11.2	7.9	7.9	27.0			
June	31.6	30.3	33.0	31.5	83	100	71	67	25	70	75	0	0	0	30.0			
July	38.5	37.3	37.4	38.0	88	96	71	66	23	68	74	0	0	0	32.6			
August	40.2	40.7	40.8	37.8	86	95	72	70	51	72	77	0	0	0	33.8			
September	33.7	34.2	34.7	32.7	86	97	65	63	33	68	75	0	0	0	32.4			
October	26.0	24.5	24.3	25.8	78	96	49	51	27	62	65	0	0	0	30.3			
November	18.6	17.6	18.0	18.6	66	83	49	49	26	58	58	62.0	55.0	55.0	26.8			
December	14.2	14.5	14.3	15.3	71	90	53	54	29	67	63	30.0	16.0	16.0	22.5			
Year	25.1	24.8	25.0	24.9	81	100	60	60	20	67	69	111.6	55.0	55.0	27.3			
	Station Pressure mb				Wind Velocity kts				Visibility km				Cloudiness /%					
	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average		
	0630	0930	1230	1830	0630	1230	1830	Max.	0630	1230	1830	0630	1230	1830	0630	1230	1830	
January	1017.7	1019.4	1017.7	1017.5	3.5	5.3	4.5	16	32	36	24	1.4	2.0	2.0				
February	1015.5	1017.0	1016.0	1015.3	2.8	6.4	5.4	16	32	35	27	1.6	2.8	2.8				
March	1012.4	1013.8	1012.8	1011.6	7.3	11.3	10.2	28	27	27	20	3.0	2.3	2.9				
April	1009.0	1010.2	1009.9	1008.1	4.0	8.8	8.2	25	27	29	26	2.9	3.2	3.6				
May	1006.8	1008.8	1007.4	1005.9	6.0	9.1	6.9	23	22	24	23	2.5	2.8	2.8				
June	1000.1	1001.1	1000.9	999.4	3.8	6.4	5.9	18	14	17	16	2.2	0.6	0.4				
July	996.5	997.3	997.8	995.5	2.5	6.3	3.4	13	13	16	15	1.3	0.7	1.1				
August	998.0	999.2	998.4	997.0	3.3	6.5	3.7	12	15	16	17	2.9	1.0	1.6				
September	1005.1	1006.7	1005.8	1004.7	4.2	7.6	5.5	13	22	24	21	1.0	0.7	0.4				
October	1011.6	1013.1	1011.8	1011.0	1.9	5.5	4.0	13	25	27	25	0.2	0.4	0.5				
November	1015.2	1016.7	1015.0	1014.9	3.9	6.2	4.8	17	37	43	34	3.5	3.5	3.6				
December	1018.3	1019.7	1018.0	1017.8	5.9	7.1	5.7	17	30	35	24	2.8	2.3	2.3				
Year	1008.9	1010.3	1009.3	1008.2	4.1	7.2	5.7	18	25	27	23	2.1	1.9	2.0				

* Average obtained by climatological comparison with Kharg Island.

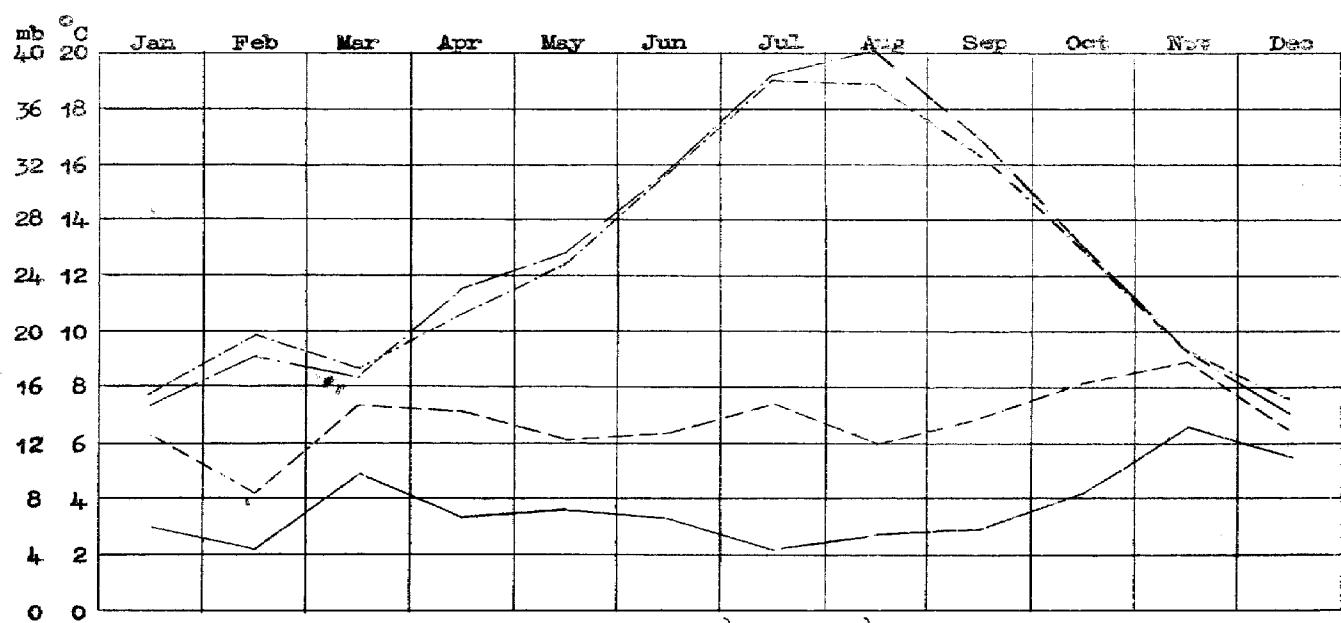


IRANIAN OIL OPERATING COMPANIES	YEARLY WEATHER SUMMARY	Year: 1963 Station: Sheikh Shu'aib
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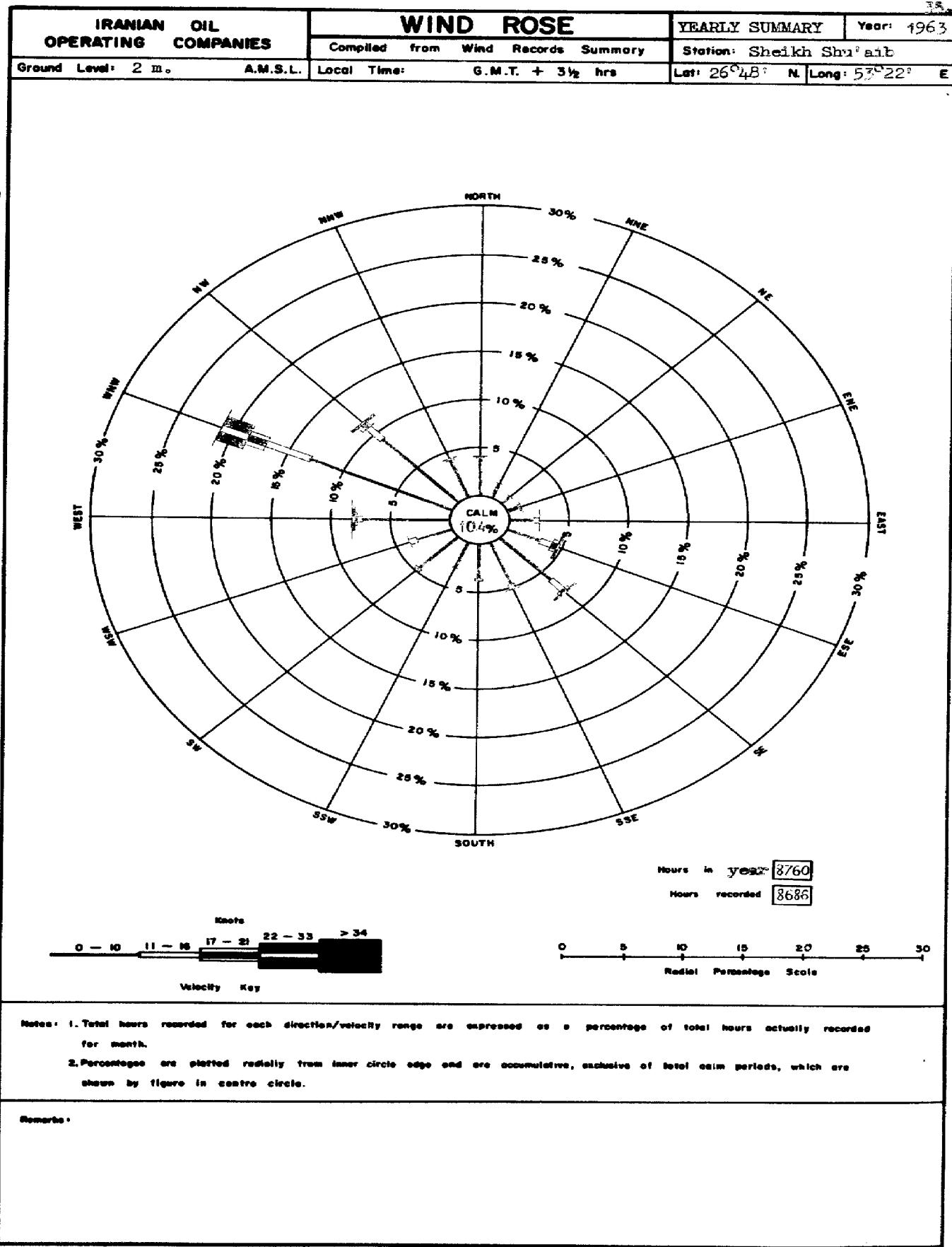


Prevailing Wind Direction for each month (in % of monthly total number of cases).

--- Monthly average of wind speed (average of 0630, 1230, and 1830 observations).

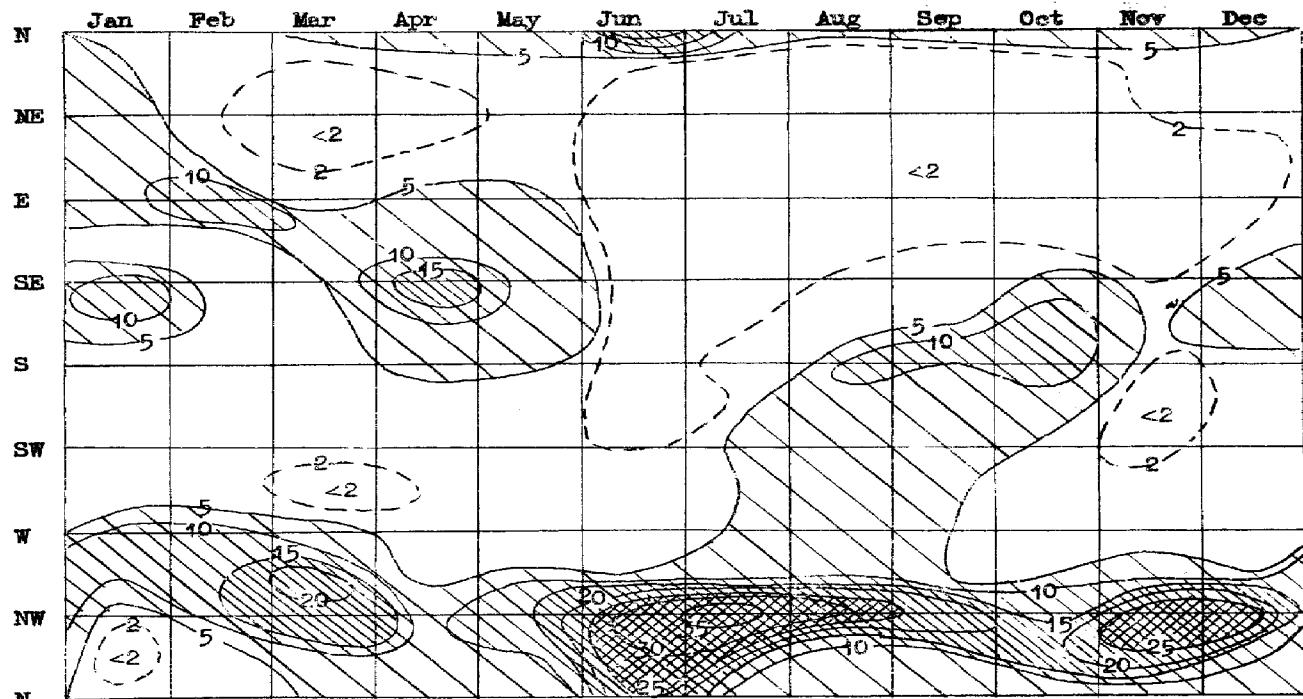


Dew Point Depression at 0630 } (in °C)
 Dew Point Depression at 1830 }
 Vapour Pressure at 0630 } (in mb)
 Vapour Pressure at 1830 }
 { Monthly Averages.



36.

IRANIAN OIL OPERATING COMPANIES	YEARLY WEATHER SUMMARY	Year: 1963 Station: Khor Musa
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Prevailing Wind Direction for each month (in % of monthly total number of cases).

